S. Hrg. 99-302, Pt. 4

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

H.R. 3424

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION, AND RELATED AGENCIES, FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1986, AND FOR OTHER PURPOSES

PART 4—(Pages 1-1105)

Nondepartmental witnesses

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DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

WEDNESDAY, MAY 1, 1985

U.S. Senate,
Subcommittee of the Committee on Appropriations,
Washington, DC.

The subcommittee met at 9:31 a.m., in room SD–116, Dirksen Senate Office Building, Hon. Lowell P. Weicker, Jr. (chairman) presiding.

Present: Senators Weicker, Specter, Proxmire, and Burdick.

CONGRESSIONAL WITNESSES

STATEMENT OF HON. CLAIBORNE PELL, U.S. SENATOR FROM RHODE ISLAND

Senator Weicker. Good morning. This morning is our first of 7 days of public witness hearings. We will be hearing first from Members of Congress, followed by public witnesses on the Department of Labor, and the Centers for Disease Control.

It is a great pleasure to have you here today, and we are looking forward to your testimony. I know that you have many other things to do, so fire away.

Senator Pell. Thank you very much, Mr. Chairman, for letting me be here to testify on this matter which is of concern to all of us, not only from my State, not only from New England, but from the United States as a whole.

What I see here is an effort to spend money that we have appropriated to provide services to our constituents, a substantial portion of which is used, to close the very same organizations that provide the services.

This morning, I would like to address two such actions directly affecting my State. The first is the Department of Labor's decision to eliminate the Boston regional office. I know that the chairman of this subcommittee is well aware of the decision because his constituents are affected as well. The second is the Social Security Administration's decision to close several hundred of its district and branch offices, specifically that Department's suggestion that it may be closing the Woonsocket branch office in Rhode Island.

As the members of this subcommittee know, an agency's decision to spend its funding, funding appropriated by this body, to eliminate its regional and field offices, is a decision that an agency can make, as I understand it, without seeking our approval.

I believe that the administration's decision to eliminate field offices, those offices providing direct services to the people, is wrong. I believe further that the administration's decision to sacrifice these types of offices should not take place unless Congress approves such an elimination.

In my mind, the Department of Labor's regional office in Boston and branch and district offices of the Social Security Administration in Rhode Island and other places are being eliminated because it has been mandated by OMB. In fact, these agencies are ignoring the impact that these decisions will have on our constituents. It will have a beneficial effect on our purses, but it will have a detrimental effect on our constituents.

In these days of drastic budget cuts in domestic programs, I do not believe that we should move in this direction. We should give our people more services, not less. It appears that many agencies would like to spend money closing their doors. Regardless of the drastic cutbacks in funding in the past several years, and regardless of the ever present need for direct services, agencies like the Department of Labor and the Social Security Administration have decided to comply with the OMB directive.

The Labor Department decided, without seeking the approval of Congress, that the functions of the Boston regional office would be transferred to New York, and the Boston office would no longer operate as a regional one. To date, no impact analysis has been submitted to Congress.

I have compiled a small portion of the data that will give us a little indication of the impact the elimination of this office will have on New England residents. For example, if the functions of the Employment Standards Administration were transferred from Boston to New York, without increasing the staff in New York, as the Labor Department has stated, the following situation would result;

One, approximately 565 litigation cases would be added to New York's 282 litigation cases;

Two, approximately 277 Government contract cases would be added to New York's 425 Government contract cases; and

Three, the two regions combined would process approximately 5,300,000 back wage cases.

In effect, what this means is that the New York workload would increase in the area of litigation by approximately 200 percent; in the area of Government contracts by approximately 65 percent; and in the area of back wage processing by about 83 percent.

I would like to add that the duties I have outlined above are performed by 10 people in the Wage and Hour Division of the Employment Standards Administration of the Boston regional office.

Does it make sense to eliminate these 10 positions, to transfer this amount of work to an already understaffed region in New York?

The Department of Labor's regional office serves a very useful purpose in New England. For example, the OSHA division works with business and industry to reduce the number of on-the-job injuries. It also works with industry and employees to assist in quickly returning employees to the work force, saving both the industry and the taxpayer money.

The Bureau of Labor Statistics of the Boston regional office responds to approximately 6,500 inquiries each month from members of the business, labor, academic, legal, and Government communities. Clearly, this division is providing a direct service to New England residents.

I believe before Congress would approve the elimination of this regional office, it would be far more critical, or should be, and I hope will be far more critical of this OMB proposal than the Department of Labor is being. The Labor Department has ignored some very essential facts concerning the services that the Boston regional office provides to New England.

Generally, the Boston regional office handles at least 18 percent, just about one-fifth, of all the case work handled by the Department as a whole. The Boston regional office has reduced its delays in service, and a transfer to New York, an office already overextended, will cause serious program and service delays to our constituents.

Several Members of this body and of the House have not only stated their opposition to this proposal but also have requested that the House Appropriations Committee consider language in its appropriations bill to prohibit the expenditure of funds for the purpose of eliminating the Labor Department's regional offices.

I would like to submit for the record letters from the New England delegation, in both the Senate and the House, opposing the elimination of the Department of Labor, and correspondence between Speaker O'Neill and Representative Natcher regarding suggested language for the appropriations bill to prohibit such an expenditure.

I would like to add here that the Labor Department has stated that it would spend approximately $6.6 million to eliminate some of its regional offices. I believe that this $6.6 million would be better spent on services to businesses, labor organizations, and individual recipients.

The present expenditure each year for the Boston regional office is approximately $5 million, and it is doing a good job in providing the necessary services.

While quickly investigating the Labor Department's proposal, I quickly realized that other agencies have decided to comply with the same OMB suggestion, and eliminate various regional, district, and branch offices. This wave of activity to eliminate administrative and field offices has caused me to question the underlying policy reasons for these decisions. What savings can we achieve when we spend money to eliminate offices that were designed to provide direct services to program recipients.

In my own State, we have been told that one of the branch offices of the Social Security Administration, located in Woonsocket, RI, may be eliminated. Again, I am informed that this is part of an overall plan to reduce administrative costs and provide more efficient services. I do not believe that this is the basis for this proposal. Like the decision to eliminate the Boston regional office, it appears that the decision to eliminate hundreds of Social Security offices has been made purely for budgetary reasons.

An assessment completed to determine whether service delivery would be impacted appears to have been done, but it appears that the assessment was not concerned with the human side of the services and program delivery. The sole concern was attaining OMB budgetary objectives and goals.

I do not believe that this is the way money, appropriated by the Congress, should be expended. I am not disputing the need and desirability of saving money, establishing more efficient methods by which each agency can operate, but I am disputing this tendency to save money by removing Government and its services from the people.

The Federal Government that operates in our States and localities serving our constituents is not the Federal Government the people want to see eliminated, nor do I believe we should eliminate it.

It is quite difficult for me to understand why, let alone justify, why the Social Security Administration would be eliminating a branch office like the Woonsocket one. It is the only branch office in the northern part of the State serving the needs of the people. It is quite difficult for me to understand why the Social Security Administration would be eliminating a branch office that services over 16,000 people that live in outlying areas such as Albion, North Smithfield, Mapleville, and Forestdale.

Where will the Social Security Administration tell these people to go when they need to file a claim for benefits? Does the Social Security Administration suggest that these individuals, who for the most part live far from public transportation, travel to another Social Security office that services over 28,000 people?

We should remember, too, that the majority of people who travel to the Social Security office are older people and poor people who cannot afford the expenses of transportation over long distances.

Frankly, when I reviewed the rationale given by the Social Security Administration, I had serious doubts as to whether any analysis had been completed prior to making the decision to eliminate some of its offices. That analysis contained no long-term projection based on the long-term needs of the public, instead, the decision seemed to be based on a short-term demand to cut costs regardless of its impact on the public.

There may be some reason to change the structure of the Social Security offices in Rhode Island to better serve the people, but there can be no justification for eliminating totally an office that serves over 16,000 people and transferring those services to another office serving over 28,000. It is clear that the savings for this proposal is on paper only, for the costs to the public would be great.

I believe that the Members of our body, especially the Members of the Appropriations Committee, should bring to a halt the recent rush to eliminate field and regional offices. Based on the data that I have gone through, I believe that the rush to eliminate field offices is not based on providing better service to the public, but is based on an arbitrary mandate to cut administrative costs by cutting those offices and positions that serve the public.

I would recommend that the members of the subcommittee consider a proposal to prohibit the spending of funds to eliminate field offices unless and until specific approval is obtained from Congress.

Senator WEICKER. Thank you very much.

Senator PELL. I thank the chairman very much indeed for his patience while I have gone through quite a long statement, but it is a very acute concern to the people of my State.

Senator WEICKER. Senator, I think you are entirely correct. We have been tracking the situation, both the Department of Labor and the Social Security Administration, and it is specially heightened by the figure of the constituency that is served by the Social Security Administration, which is not decreasing but climbing rapidly.

I fail to understand how they can cut back on the personnel by some 20 percent, or even more than that. I can assure you that your concerns are concerns of the committee also. We will take a very careful look at this matter, not only in the regional sense, obviously that is important to you and I, but in the general sense.

PREPARED STATEMENT

Thank you very much indeed for your sympathetic statement. Thank you very much. We will insert your prepared statement in the record.

Senator PELL. Thank you very much, Mr. Chairman.

[The statement follows:]

STATEMENT OF SENATOR CLAIBORNE PELL

I would like to thank the Chairman for allowing me to address the subcommittee, this morning, concerning a matter that is important, not only to me but also to a number of my colleagues in both the Senate and the House. That matter concerns the administration's expending appropriated funds to eliminate regional and field offices. In essence, I believe the administration is spending money, money that we have appropriated to provide services to our constituents, to close regional and field offices of a number of agencies.

This morning, I would like to address two such actions directly effecting my state. The first, is the Department of Labor's decision to eliminate the Boston Regional office; I know that the Chairman of this Subcommittee is also aware of that decision because his constituents are affected, as well. The second, is the Social Security Administration's decision to close several hundred of its District and Branch offices; specifically that Department's suggestion that it may be closing the Woonsocket Branch Office in Rhode Island.

As the Members of this Subcommittee know, an agency's decision to spend its funding, funding appropriated by this body, to eliminate its regional and field offices, is a decision that an agency can make without seeking Congressional approval. I believe that the Administration's decision to eliminate field offices, those offices providing direct services to the people, is wrong. I believe, further, that the Administration's decision to sacrifice these types of offices should not take place unless Congress approves such an elimination.

In my mind, the Department of Labor's Regional Office in Boston and Branch and District Offices of the Social Security Administration in Rhode Island and in other states, are being eliminated because it has been mandated by the Office of Management and Budget and not to improve service delivery to our constituents. Frankly, I have concluded that these Agencies are ignoring the impact their decisions will have on our constituents.

In these days of drastic budget cuts in domestic programs, I do not believe that millions of dollars should be spent closing the doors of local offices and eliminating services to the people. Clearly, that money is better spent bringing programs and services to people in need rather than closing the doors of local offices, permanently.

It appears, however, that many agencies would rather spend money closing its doors. Regardless of the drastic cuts backs in funding over the past several years and regardless of the ever present need for direct services, Agencies, like the Department of Labor have decided to comply with an OMB directive dictating it to eliminate as many Regional Offices as it takes to meet an OMB amount.

Thus, the Department of Labor has proposed that several of its Regional Offices be eliminated and the functions of some Regional Offices be transferred to other Regional Offices. Because I am most familiar with the Boston Regional Office, I will direct my comments to that situation.

The Labor Department decided, without seeking the approval of Congress, that the functions of the Boston Regional Office would be transferred to New York and that the Boston Office would no longer operate as a Regional Office. To date, no impact analysis has been submitted to Congress.

I have compiled some of the data that will give us a small indication of the impact the elimination of this office will have on New England residents. For example, if the functions of the Employment Standards Administration were transferred from Boston to New York (without increasing staff in New York, as the Labor Department has stated), the following situation would result: (1) approximately 565 litigation cases would be added to New York's 282 litigation cases; (2) approximately 277 government contract cases would be added to New York's 425 government contract cases; (3) The two regions combined would process approximately 5,300,000 back wage cases.

In effect, New York's work load would increase in the area of litigation by approximately 200%; in the area of Government contracts by approximately 65%; and in the area of back wage processing by approximately 83%.

I would like to add that the duties I have outlined above are performed by 10 people in the Wage and Hour Division of the Employment Standards Administration of the Boston Regional Office.

Does it make any sense to eliminate these 10 positions; to transfer this amount of work to an already understaffed Region in New York?

The Department of Labor's Regional Office also serves a very useful purpose in New England. For example, the Occupational Safety and Health Division works with business and industry to reduce the number of on-the-job injuries. It also works with industry and employees to assist in quickly returning employees to the work force saving both the industry and the taxpayer money. This division also has implemented new programs that work with young people to educate them concerning job related hazards and work safety since most job related injuries occur within the first year of employment. Eliminating this Regional Office will eliminate these vital services.

The Bureau of Labor Statistics of the Boston Regional Office responds to approximately 6500 inquires each month from members of the business, labor, academic, legal and government communities. Clearly, this division is providing a direct services to New England residents.

I believe before Congress would approve the elimination of this Regional office, it would be far more critical of this OMB proposal than the Labor Department has been. I believe that the Labor Department has ignored some very essential facts concerning the services the Boston Regional Office provides to New England. Generally, the Boston Office handles, at least, 18% of all the case work handled by the Department. The Boston Office has reduced its delays in service, and a transfer to the New York Office, an office already overextended, will cause serious program and service delays to our constituents. What then can be the logic behind this proposal? I do not understand it.

Several Members of this body and several members of the House have not only stated their opposition to this proposal but also have requested that the House Appropriations Committee consider language in its appropriations' bill to prohibit the expenditure of funds for the purpose of eliminating the Labor Department's Regional Offices. I would like to submit for the record letters from the New England delegation, in both the Senate and the House, opposing the elimination of the Department of Labor and correspondence between Speaker O'Neil and Representative Natcher regarding suggested language for the appropriations' bill to prohibit such an expenditure.

I would like to add here, that the Labor Department has stated that it would spend approximately 6.6 million dollars to eliminate some of its Regional Offices. I believe that this 6.6. million dollars could be better spent on services to businesses, labor organizations, and individual recipients.

While investigating the Labor Department's proposal, I quickly realized that other agencies have decided to comply with the same OMB "suggestion" and eliminate some of its regional, district and branch offices. This wave of activity to eliminate administrative and field offices has caused me to question the underlying policy reasons for these decisions. What savings can we achieve when we spend money to eliminate offices that were designed to provide direct services to program recipients?

In my own state, we have been told that one of the Branch Offices of the Social Security Administration, located in Woonsocket, Rhode Island, may be eliminated. Again, I am informed that this is part of an overall plan to reduce administrative costs and provide more efficient services. I do not believe that is the basis for this proposal.

Like the decision to eliminate the Boston Regional Office, it appears that the decision to eliminate several hundred Social Security Offices has been made solely for budgetary reasons. An assessment completed to determine whether service delivery would be impacted appears to has been done but it appears that the assessment was not concerned with service and program delivery. Its sole concern was attaining OMB budetary objectives and goals.

I do not believe that this is the way money, appropriated by Congress, should be expended. In her testimony before the House Ways and Means Committee, Martha McSteen, Acting Commission for Social Security, failed to make clear why she was planning to eliminate several hundred Social Security Offices that directly serve program recipients.

I am not disputing the need and desirability of saving money and of establishing a more efficient method by which each agency can operate, but I am disputing the vigorous desire on the part of agencies to cut costs by eliminating those offices that directly serve the people. The federal government that operates in our states and localities serving our constituents is not the federal government the people want to see eliminated, nor do I believe we should eliminate it.

It is quite difficult for me to understand, let alone justify why the Social Security Administration would be eliminating the Woonsocket Branch office. It is the only Branch Office in Rhode Island serving the needs of the people who live in the northern section of my state. It is quite difficult for me to understand why the Social Security Administration would be eliminating a branch office that services over 16,000 people in my state that live in outer-lying areas such as, Albion, North Smithfield, Mapleville and Forestdale. Where will the Social Security Administration tell these individuals to go when they need to file a claim for benefits. Does the Social Security Administration suggest that these individuals, who for the most part live far from public transportation, travel to another Social Security Branch Office that services over 28,000 people.

Frankly, when I reviewed the rationale given by the Social Security Administration, I had serious doubts as to whether any analysis had been completed prior to making the decision to eliminate some of its offices. That analysis contained no long term projections based on the long term needs of the public; instead, the decision seemed to be based on a short term demand to cut costs regardless of its impact on the public.

There may be some reasons to change the structure of the Social Security Offices in the state of Rhode Island to better serve the people but there can be no justification for eliminating totally an office that serves over 16,000 people and transferring those services to another office serving over 28,000. It is clear that the savings for this proposal is on paper, only; for the costs to the public would be great.

I believe that the Members of this body, especially the Members of the Appropriations Committee must bring a halt to the recent rush to eliminate field and regional offices. Based on the data that I have read and that I have been able to transmit to this Subcommittee, I believe that the rush to eliminate field offices is not based on providing better service to the public but is based on an arbitrary mandate to cut administrative costs by cutting those offices and positions that serve the public. I would recommend that the Members of this Subcommittee consider a proposal to prohibit the spending of funds to eliminate field offices unless and until specific approval is obtained from Congress.

STATEMENT OF HON. DONALD W. RIEGLE, JR., U.S. SENATOR FROM MICHIGAN

Senator WEICKER. The subcommittee will now hear from Senator Riegle.

Good morning, Senator. It is good to have the Senator from Michigan here to testify before this subcommittee. You may proceed as you wish.

Senator RIEGLE. It is a pleasure to appear before you today. Particularly, I am here to request funds for the Latchkey and the Information and Referral Programs which happen to be a very keen personal interest of mine.

We are facing a situation in the country where the nature of the work force is changing very dramatically. Today, most of the mothers in the country are working as are the fathers, so the problem of providing care for children, particularly young children, has become very acute.

One of the ways to try to deal with this has been to develop latchkey programs where elementary school-aged children can remain at the school site at the end of the school day, until their parents have finished work.

In the absence of such a program, and I am talking on a broad scale, what we are seeing are literally millions of children without adequate supervision, many of them coming home at the end of the school day to an empty house. This is a major cause of home fires in the city of Detroit. These young children are home alone, without adequate supervision, and many lives have been lost.

The other day, I had the occasion to have a large public meeting on this issue in Michigan. There is great interest by many people who want to facilitate the initiation of these latchkey programs in the school systems, using predominantly local money. Getting these programs set up and running so that we have them in place is really where Federal help comes in.

I was talking with some UAW members who work at the AC division of General Motors for many years, and they described a situation in World War II when the male part of our work force was called out to the war. Almost overnight women in very large numbers had to leave home and come into the factories, and other work settings, to take over the physical work that had been done by men who were now in the Armed Forces.

As a result, what happened was that most of the companies in the United States developed on-site day care centers for these children. They had to because there was no other place for the children to be.

After they described to me how this had happened on a very broad national scale during the height of mobilization in World War II, they then went on to say that there are today more women working in the work force than there were at the height of World War II. Yet we don't have any corresponding program to try to deal with the problems of these children while their mothers are working.

The Latchkey Program is a way to get this done for a fraction of the cost that it might otherwise cost. You have an established public building, with qualified people that work there. The children will be under supervised care, so that we don't run into problems that we have seen in other situations.

I am extemporizing here, rather than delivering my prepared statement, which I want to make a part of the record. But I want to go precisely to the funding question, which is why we meet here today.

These programs were authorized for $20 million in fiscal year 1985. The legislation called for the establishment of two independent but certainly interrelated programs for dependent care. Sixty percent of the $20 million will be allocated for before and/or after school-age child care for our Nation's latchkey children.

These programs would be established in public, private or community centers, but principally at school sites, and would include parental involvement at the planning and development stage. In addition, these before and after school programs must meet all State and local license requirements.

The remaining 40 percent of the authorized moneys would go toward the establishment of dependent care information and referral programs. These programs would not be exclusively for school-age children, but could also be used to provide dependent care information for elderly and disabled persons.

The Human Services Reauthorization Act was passed so late in the 98th Congress that there was insufficient time to secure the needed appropriation for these new programs. But I am here today because I feel that the appropriations, as small as they are, are vital. I am, therefore, hoping that the committee will see fit to authorize the full $20 million, and include it in the supplemental appropriation that the subcommittee will soon be considering.

I think that it is a small but absolutely essential investment in the future well-being of our children. It also provides us the opportunity to come to grips with this problem of the child care needs of our young population where both mothers and fathers are in the workplace striving to maintain their standard of living.

I would hope, Mr. Chairman, that this might be looked upon favorably. I will say one other thing, there is an enormous grassroot support for this effort. The need is real, we have taken a step here in the Senate, with our own child care center, as an expression of the need that is felt right here.

I think the time has come to address this problem. Patterns of living have changed sufficiently, and there is an enormous national need that is not being met. I think that this is an intelligent way for us to endeavor to meet it.

PREPARED STATEMENT

Senator WEICKER. Thank you, Senator. Your submitted statement will be inserted in the record at this point.

[The statement follows:]

STATEMENT OF SENATOR DONALD W. RIEGLE, JR.

It is a pleasure to be here this morning and have the opportunity to testify before the Subcommittee on Labor, HHS, Education and Related Agencies of the Committee on Appropriations. I would also like to express my gratitude to the Chairman, Senator Weicker for this opportunity to request funding in the forthcoming Supplemental Appropriations Bill for the State Grants for Dependent Care Planning and Development (Latch-key and I.& R. program). As you know, the program was authorized during the closing hours of the 98th Congress. However, there was insufficient time to secure an appropriation for the program through the regular appropriations process. I am before you today urging that we complete the action that we began in the Senate last year.

I am deeply worried that without greater attention to the issue of child care at the federal level, that as a nation, we will be ill equipped to meet the future needs of our children. There is a deep and widespread need for safe and adequate child care in this country. During my tenure in Congress, I have been working to bring a focus to this crucial issue and the need to actively design Federal, State, and local initiatives to meet the growing need of affordable, safe and high quality child care for our children.

The need for quality child care is not limited to the preschool population of children. Up until recently, most of the discussion in child care was focused on the preschool child. The fact remains that the parents most likely to be working full time are those with children already in school. America passed an important cross road in the mid 1970's, for the first time, more than 50% of mothers of school age children were employed outside the home.

The number of "latch-key" children continues to grow and the need for quality child care for the school-age population (5-13 years of age) has increased dramatically during the past decade. There are roughly 30 million children in the United States who fall within this age group. There are some who estimate that as many as 7 million children, or 23 percent of this school-age population are "latch-key" children who return home alone and remain unsupervised after school until their parents return home from work. In Michigan, we estimate that there are over 150,000 of these children.

As I mentioned, the increasing participation in the workforce by women, single parents, and two-parent working families is a contributing factor fueling the rise in the number of "latch-key" children. Today, women make up the majority of the labor force and over half of all mothers with young children work. The Bureau of Labor Statistics estimates that in 1984, 59% of children 6-13, and 63% of children 14-17 years of age had working mothers. These statistics are low for they fail to include the children who are 5 years of age, many of whom attend half day kindergartens. The National Center for Educational Statistics in 1980, estimated that 1.5 million children 5 year old, had mother's who were employed full-time. This may be the age group with the greatest need for some form of before and/or after school care in the United States.

The predicament of the "latch-key" child is greater than just the number of children left alone. The potential of serious physical and psychological risk of a child left in self-care is unacceptably high. The Senate Children's Caucus held their first policy forum in 1983 on "latch-key" children. Experts spoke about the risks involved when young children are left alone. Accidents are the major cause of death of school-age children in this country. Roughly 6,000 children in this age group die annually as a result of accidents. In nearly all of these cases no adult is present. The fire department of Detroit has reported that one out of six fires is caused by a child at home alone. In addition, early unintentional exposure to alcohol and drugs, poor nutrition, fear and loneliness are just a few of the health hazards faced by these children.

The research also suggests that unsupervised children are vulnerable to more subtle problems. There may be developmental problems for youngsters deprived of interaction with peers and adults for a significant amount of time during the week. The delegation of responsibility to children for their own care and perhaps the care of even younger siblings is inappropriate and places an undue burden which may leave them feeling inadequate.

There has been resistance at the national level with regard to this problem. Before the 98th Congress, the last time Congress passed a child-care bill was in 1971. That bill, a comprehensive child care initiative, unfortunately, was vetoed by then President Nixon. The 98th Congress finally saw a move away from this inaction. Towards the close of the 98th Congress, we were able to secure the passage of the "Human Services Reauthorization Act," P.L. 98-558, which called for the establishment of a Dependent Care Grant Program to fund the start-up of school-age child care programs, and dependent care information and referral centers. This grant program is a modified version of S. 1531, the "School Age Facilities Child Care Act", which I originally introduced in June of 1983. This was the first piece of federal legislation designed specifically to address the needs of 'latchkey' children.

I was both pleased and excited that we were able to secure passage of the Latch-Key and I.& R. programs within the environment of domestic spending restraint. This legislation is a first step toward addressing the child care needs of the millions of children in the United States who return home alone after school and remain unsupervised for long periods until their parent or parents return home from work.

Mr. Chairman, I believe it is essential that the federal government develop a comprehensive approach to address the child care needs of the Nation and to ensure that we are able to meet the challenge of rapid growth. Passage of school age child care legislation was a significant step taken by the last Congress. Hopefully, this piece of legislation will be the first building block in the development of a comprehensive network of child-care services. For it is clear, that the present patchwork system of child care in our nation is insufficient and ill-equipped to meet the mushrooming demand.

These "latch-key" children need our attention now. It is an issue which affects many of us within this country including parents and their children, policymakers at the Federal, State and local level, school officials, and those in our social services agencies. The development of a strong school age child care program within this country is essential and we have the opportunity by including funds in the next Supplemental Approriations Bill to begin this process.

The Latch-Key and I.& R. programs were authorized for $20 million beginning in FY 85. The legislation called for the establishment of two independent but certainly interrelated programs for dependent care. Sixty percent of the $20 million will be allocated for before and/or after school-age child care for our nation's latch-key children. These programs would be established in public, private, or community centers, and must include parental involvement at the planning and development stage. In addition, these before and after school programs must meet all state and local licensing requirements. The remaining 40% of the authorized moneys will go towards the establishment of Dependent Care Information and Referral programs. These programs would not exclusively be for school-age children, but could also be used to provide dependent care information for elderly and disabled persons.

The funds for these two new very important programs will be distributed to the states based on population and will require a 25 percent State match. The states may operate the grant programs directly or they may contract with local governments or non-profit organizations. In the legislation, grants are only earmarked for planning and development or the expansion of existing school age child care and/or information and referral programs. Under current law there are no funds authorized for the operation of such programs.

As I mentioned, the "Human Services Reauthorization Act" was passed so late in the 98th Congress, that there was insufficient time to secure the needed appropriations for this new program. Such appropriations are vital, and I am before you today requesting that the full authorization of $20 million be included in the Supplemental Appropriation Bill that the Subcommittee will soon be considering. This $20 million is a small but necessary investment for the future well-being of our children. However, I believe this small investment in our children today will reap significant benefits and savings in the years to come.

For the record, I would like to insert a list of the groups that supported passage of school age child care legislation. Without appropriations for this program, our legislative success last fall will be but a hollow victory for our nation's children.

Mr. Chairman, as America enters the final fifteen years of this century, it finds itself in the midst of sweeping social and economic changes which are certain to have a lasting impact on even the most basic aspect of our daily life. The national problem of a lack of adequate child care is a complex problem. It will require us as legislators to examine a full spectrum of approaches in our attempt to address this issue of child care. The appropriation of funds for the State Grants for Dependent Care Planning and Development. It needs our bipartisan support. I look forward to working with you to improve child care for our children, and I thank you for the opportunity to testify today. Thank you.

S. 1531-SCHOOL FACILITIES CHILD CARE ACT

American Association of School Administrators
American Association of University Women
American Bar Association
American Red Cross
Association of Junior Leagues, Inc.
Boys Club of America
Camp Fire, Inc.
Children's Defense Fund
Girl Scouts of U.S.A.
Girls Clubs of America, Inc.
Michigan Association for the Education of Young Children
Michigan Association of Children's Alliances
Michigan NOW
Michigan Office for Young Children
Michigan Women's Commission
National Association for the Education of Young Children
National Association of Counties
National Association of Elementary School Principals
National Black Child Development Institute
National Commission on Working Women
National Education Association
National Network of Runaway and Youth Services
National Organization for Women
National PTA
National Women's Political Caucus
National Youth Work Alliance
Parents Without Partners
Roosevelt Youth Centennial Project
United Neighborhood Centers of America, Inc.
YMCA of the U.S.A.
YWCA of the U.S.A.

Senator WEICKER. You know, about 4 months ago, when Jake Javits was in the hospital, this was one of the times he spent time in the hospital, Claudia and I went to visit him. He said, "You know, Lowell, the greatest issue that ought to be addressed by the private sector, by business in this country, is day care." He said, "Believe me, anything that you can do to get this huge problem in the hands of the private sector, I think would make all sense in the world." He really thought that this was the hottest issue.

Jake has a keen mind, always able to see way down the road.

I couldn't agree with you more, Senator. I think clearly something has to be done. I gather that this is a matter that we are going to try to get in the supplemental, and this is what we are going to be pushing for.

Senator RIEGLE. That is the hope.

Senator WEICKER. I don't think that there is any doubt about the fact that the idea is certainly something that ought to be pressed. It is not a drop in the bucket in view of what is out there that needs to be done. By the same token, I have not followed through on Jake's suggestion because I have all that I can handle in keeping the administration from knocking down everything that is good in the budget right now, but it is something that I would like to work with you on down the road and help you devise a program. I am more than willing to help in the Federal Government sense right now.

Why isn't this something that the private sector should take on its shoulders?

Senator RIEGLE. I think it should, and there are some examples of some corporations today that have done this. I think IBM, for example, has been forward acting in terms of trying to provide day care services through different kinds of means.

My concern is that the problem has exploded on us so fast that we are way behind in terms of understanding the dimensions. I might say that the moneys that we are talking about here are only to allow the programs to be set up. There are no operating funds so that they have to be self-supporting. From what we have seen so far, they will be.

By coming through the States, down to the local communities where there is the center of interest and the momentum to want to do this, the thought is that if we at the Federal level help getting this started, it will broaden out.

Presumably, as we see how to meet the needs, the private sector can be more fully drawn in, and I certainly hope and expect that this will be the case. I might say that we have a list of national organizations that are active supporters of the legislation and the approach, and of the funding, which include, I will not mention them all, but the American Association of University Women, the American Bar Association, the Red Cross, the Girl Scouts of the United States, the National PTA, and many other significant organizations who have gotten involved enough in this issue to formally come forward to indicate that they want to see this happen, and that they will be participating in helping to make this successful.

This is not a small-scale thing. This is something that is building with some momentum. I would be happy to work with you to try to figure out how we might get the private sector more directly involved. I think that we are approaching the point where the percentage of the work force would sort of trigger it.

It seems to me that in areas where a high percentage of the work force would be composed of mothers who are primary care givers to children in our society, that there ought to be some kind of a day care facility connected to that, if not at the worksite adjacent to it for those children who have not yet reached school age. Otherwise the kids get caught in the shuffle.

Our statistics show that about 6,000 school-age children a year die in accidents, many of them because they are just in a situation where they are not getting the supervision and care of a sufficient kind.

It is a big problem, and I think that it is one that we can do something about. As you said, this is a drop in the bucket, but it is an affirmative response, and it lets the serious people out there, who want to get it going, put things together to start making a difference.

Senator WEICKER. I greatly admire your standing on this issue, Senator. Believe me, this is not a nice to have item, things have changed dramatically as far as the work force, this is a must, and we will do everything that we can to make it happen.

Senator RIEGLE. Thank you, we appreciate it.

Senator WEICKER. Our next scheduled witness is the Honorable Ben Blaz. Is he here?

Why don't we move to the next witness, and then we will come back when the Congressman gets here.

NONDEPARTMENTAL WITNESSES

Department of Labor

STATEMENT OF BETTY L. TIANTI, SECRETARY-TREASURER, CONNECTICUT STATE AFL-CIO

Senator WEICKER. The next witness is on the Department of Labor, my very dear friend, a very eloquent spokesman for labor in the State of Connecticut, the secretary-treasurer of the Connecticut State AFL-CIO, Betty L. Tianti. John Bristol likes to think that he runs the AFL-CIO, but those of us in the know know that it is Betty who runs the AFL-CIO. We all have great affection for John also.

I am willing to say the same thing about my office. I don't run my office. There are usually two or three people who run my office.

Senator SPECTER. Mr. Chairman, I wonder if I might interject for just a moment.

Senator WEICKER. Yes, indeed.

Senator SPECTER. Mr. Chairman, I regret that I cannot stay because of other commitments, but I do have some questions for the record, which I would appreciate if they could be submitted to the witnesses in due course.

Senator WEICKER. This witness?

Senator SPECTER. No; they are for other witnesses.

Senator WEICKER. We would be delighted to go ahead and see that your questions are submitted for response to the record at the appropriate time.

Senator SPECTER. Thank you very much, Mr. Chairman.

Senator WEICKER. Good to have you.

Betty, why don't you go right ahead.

Ms. TIANTI. Thank you, Senator Weicker.

It is a pleasure to be here today, and I thank you for the opportunity to appear before you. The AFL-CIO, in the interest of saving time of the committee and your time, will be submitting a rather comprehensive statement on the Department of Labor budget. I obviously wish to associate my remarks to that statement, however, I think, representing the working people of the State of Connecticut and the northeast region that there are some particular concerns that I would like to address this morning, which are contained in my statement.

First, and foremost, is the Department of Labor's proposal to close and consolidate its 10 regional offices into 7. On the closing of the Boston regional office, we would urge that this not be done. Certainly, the people in the northern tier of New England will find it a real hardship to have to travel to New York City, which is the proposal, to transfer the responsibilities of the Boston regional office to New York. They would find it difficult, and certainly not as accessible. So we urge you not to support that closure. Not only would it cost jobs, but the inconvenience for the workers who are served by the Boston regional office, they would be done a disservice.

I have more in my statement, which gives you some of the reasons why we would oppose that.

Second, we are very much concerned with the funding of JTPA. We have a great deal of concern about the Connecticut United Labor Agency, which is a nonprofit organization established by the AFL–CIO, who is a prime contractor of the dislocated worker moneys in the State of Connecticut. We believe that they are doing an outstanding job.

In fact, yesterday afternoon, we were hosts to a delegation of foreign trade unionists sponsored by the U.S. Department of Labor as national labor agency, being a model labor community service organization in the whole United States.

The U.S. Department of Labor chose us as that, and we have a good deal of pride in our operations. We have contracted with the U.S. Department of Labor to do the dislocated worker. We also have contracts with several of the SDA's and the PIC's to operate the disadvantaged title 2A programs.

We have an excellent track record. We have ranging from 78 to 96 percent placement in jobs at an average wage, in the case of dislocated workers, of $7.22 an hour, and in the case of disadvantaged workers, it is $6.71, I believe. These disadvantaged workers, there is an average unemployment of 13 plus months of unemployment. I think there is no question in terms of the success of the program.

However, when you consider the proposals in next year's budget—at the time that I prepared my testimony, there was a potential for a rescission in this fiscal year, I am glad to see that the deadline went past and that did not occur. As I understand it, the proposal in the budget is based on the assumption that the rescission did, in fact, take place. We in Connecticut, from the title III moneys received, I think $1.4 million last year, if the budget goes through as it is proposed, we would receive approximately $424,000, and I think we have identified over 5,000 dislocated workers that we are not able to serve because of the lack of resources.

The same is true in a final area that I particularly wish to point out, the Summer Work Program for Youth. It seems to me that it is ironic. Connecticut is recognized as one of the highest per capita income States in the Nation, yet we have two of the poorest cities in the country, New Haven and Hartford. To many of these youngsters, it is their sole opportunity to experience jobs through the Summer Youth Employment Program, and we urge that you consider that.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for making the effort to come down. Your testimony in its entirety will be included in the record, and the additional material that you supply to the committee will also be included in the record.

[The statement follows:]

Statement of Betty L. Tianti

Senator Weicker, members of the committee, my name is Betty L. Tianti, Secretary-Treasurer of the Connecticut State AFL-CIO; I appreciate the opportunity to appear before you today.

The working people of Connecticut are certainly concerned with all of the issues your sub-committee must address regarding FY 86 appropriations. Toward that overall concern, I would like to associate myself with the remarks of the National AFL-CIO. There are however some areas where we have personal experience and it is to these I will address my remarks.

First, is the Department of Labor's proposal to consolidate its 10 Regional offices into 7. This proposal will eliminate three regional offices and 196 employees with a projected annual cost saving of $11 million.

The Boston Regional Office of the Department of Labor is one of the offices which will be closed and its operations merged with the New York Regional Office. Six million additional workers will be added to the workload of the New York office. A total of 16 million workers will now be office which is already overburdened with a very heavy caseload.

The Boston Regional office is currently serving the people in an effective, efficient manner. In the state of Maine alone, the Boston Regional office has obtained the highest placement rate of any JTPA program in the New England region; it has implemented a new OSHA program to educate school children in occupational saftey and health; set up a new Womens Bureau program to address career and work needs of Indian women; and installed a new Office of Workers' Compensation management team to clean up the backlog of worker compensation cases.

In order to plan and implement useful programs, people in a decisionmaking capacity have to be familiar with the residents, economy, and unique characteristics of a group of States. The New York office does not possess the same insight on New England as an office located in the area.

Looking beyond planning, we have to consider the delivery of services which the residents in the New England region have a right to expect. Will all the services provided by the Boston Regional office now be handled by telephone or mail out of the New York office? If this is the case, additional time delays will be added to already lengthy and complicated procedures.

There is no question that the proposed consolidation will place an unfair burden on the workers of Connecticut and New England. We ask you not to let this happen.

The second problem which I would like to address is the proposed reduction in funding of $119.5 million in the dislocated workers program under the Job Training Partnership Act, and the $100 million reduction in the JTPA Summer Youth employment and training program.

Adequate funding for these programs is particularly urgent in light of (1) the recent Bureau of Labor Statistics report on 5.1 million workers who lost their jobs in plant closings between January 1979 and January 1984; (2) the high unemployment, 45 percent in March 1985, of black teenagers; and (3) the job-destroying impact of the nation's huge trade deficit of $123 billion in 1984. It is estimated by the AFL-CIO that 2 to 3 million jobs were lost in the last 4 years due to the expanding trade deficit.

The 54% recission in the dislocated workers program at the national level will have drastic effects on programs which are currently serving the needs of the unemployed throughout the nation and Connecticut.

In Connecticut, the United Labor Agency (ULA), a non-profit organization will have its funding reduced by 70% because of the administration funding reductions. The $1.4 million which was received for FY 85 will be cut to a mere $322,000 for FY 1986.

The ULA, which does not charge its clients a fee, provides information and counseling services to victims of job dislocation, assessment, referral, counseling and follow-up services to dislocated and disadvantaged workers, specific skill training to dislocated workers whose skills are not immediately transferable to jobs in demand, and a structured approach to job re-entry through the use of self-initiated job search skills.

Funding for the agency operations comes from many sources, including the State Job Training Coordinating Council, United Way agencies throughout the state, four Private Industry Council and the Connecticut State AFL-CIO. But; it relies heavily on JTPA Title III and Title II(a) grant money.

The ULA, with a staff of 35 throughout the state, has enrolled and serviced approximately 1500 dislocated and disadvantaged workers in their Title III and II(a) programs since they began operations in 1982. They have successfully placed an impressive 78 to 94% of the workers who have taken part in the program. These placements are at average wages of $7.22 in the dislocated worker program and $6.21 for disadvantaged workers unemployed for an average of 13 months. (see Appendix)

Even with Connecticut's low unemployment rate of 4.7 percent a program like the ULA is vital to the needs of workers who have lost their job because of plant closing or indefinite layoffs. In the last 9 months alone, Connecticut has lost nearly 5,200 jobs because of plant closings. Through no fault of their own working men and women are out of work, some of them with as much as 25 to 30 years service with a particular employer.

The United Labor Agency is a life line to these people who have nowhere to turn at a very traumatic point in their lives.

Jobless workers should have the opportunity for the training in skills that lead directly to jobs. These types of programs should be greatly expanded, not reduced. Training allowances should be provided, and there should be more, not less targeted job training for adult workers including women, minorities, and other groups with special needs.

Finally, the reduction in funding proposed for the Summer Youth program would have a disastrous impact on the disadvantaged youth in Connecticut. It is of particular concern to note that while Connecticut is recognized as one of the highest per capita personal income states, it also has 2 of the 10 poorest cities in the Nation; Hartford and New Haven.

In these two (2) cities alone, the Summer Youth programs represent, in many instances, the only hope for young people who feel they have been victimized and discarded by society.

We urge you to consider the effect on the people of Connecticut, and the Nation, when you address the very painful process of budget cuts. Do not cut programs which are vital to the well being of our citizens when you consider the bottom line.

The Northeast Council of the AFL-CIO, comprised of the six States of New England, plus New York, New Jersey, Pennsylvania, and Maryland join me in support of these programs. Attached to my statement is a copy of a resolution that the Council adopted unanimously at its April 17, 1985, meeting.

Thank you again for the opportunity to appear before the committee.

Contract #000124

DISLOCATED WORKERS STATISTICS

Period ending 3/30/85

	BRIS	DANB	MDL	SMU	HTFD	TORR	EMC	WILL	NAUG	NORW	TOTALS	PLANNED	% VARIANCE
TOTAL ENROLL	9	14	9	97	131	49	70	8	12	7	406	274	148
TOTAL TERM	7	7	4	54	89	37	36	3	5	0	242	168	144
ENT. EMP.	7	7	3	47	79	32	34	2	5	0	216	123	175
OTHER POS.	0	0	1	5	10	5	-	1	0	0	22	33	150
NEG. TERMS.	0	0	0	2	-	-	2	0	0	0	4	12	33
AVG WAGE	7.66	7.14	5.66	7.07	6.93	7.90	7.93	6.00	5.25	--	7.22	4.91	147
CLIENT CHARACTERISTICS													
MALE	7	9	8	56#	91	31	39	4	7	1	253		
FEMALE	2	5	1	41#	40	18	31	4	5	6	153		
EX-OFFENDERS	1	0	0	4#	3	0	#	0	1	0	5		
MINOR-ITIES	1	0	0	35#	43	1	#	2	2	4	53		
HANDI-CAPPED	1	0	0	2#	3	1	2	1	0	0	8		
PUBLIC ASSIST.	0	0	0	11#	7	0	#	0	#	0	7		
VETS	3	0	2	14#	29	21	2	#	2	0	59		
YOUTH	0	0	0	#	0	2	#	0	#	0	2		

Information unavailable

CT UNITED LABOR AGENCY
EMPLOYMENT ASSISTANCE PROGRAM (IIA)
PERFORMANCE REVIEW
PY'85

CLIENT ACTIVITY

	PLANNED	ACTUAL	% VARIANCE
Total Served	224	267	119
Total Terminated	177	196	110
Entered Employment	140	172	122
% Entered Employment	79	87	110
Other Positive	20	21	105
Negative Terminations	19	4	21
Average Length Unemployment		13.1	
Average wage at placement		6.21	

CLIENT CHARACTERISTICS

	TOTAL	% ALL SERVED
Sex: Male	167	62
Female	100	38
Ex-offenders	18	6
Minorities	34	12
Handicapped	60	22
Public assistance recipients	55	20
Veterans	65	24
Youth	29	10

Resolution on U.S. Department of Labor Budget

The Northeast AFL-CIO Council is deeply concerned about the cuts in "people programs" in the proposed FY 1986 federal budget. We believe that these programs are targeted to bear a disproportionate share of the burden of budget cuts.

Specifically, we are concerned that the Labor Department budget does not adequately address the common interests of the Northeast. These include, but are not limited to, the continued operation of the Boston Regional Office of the Labor Department and adequate funding for the Job Training Partnership Act.

Workers in the region need the programs of the Boston office to expedite services. To consolidate Boston operations with the New York region will create hardship for a significant number of the people we represent. To travel from Maine to New York, or to have to conduct business by mail or phone, will place an unfair burden on the workers of New England.

The performance of JTPA in the Northeast Council area is a record for which we are justifiably proud. Instead of cutting back on funding for the disadvantaged or dislocated worker, we urge Congress to increase funding for job training programs.

Therefore, the Northeast Council of the AFL-CIO meeting in Atlantic City, New Jersey, this 17th day of April 1985 calls upon Congress to provide funds to ensure that the Department of Labor will continue these vital programs.

Senator WEICKER. I want to remind everyone who is going to be testifying today, on my right, you will see three lights. You begin your statement when you see the green light, and you have 3 minutes to summarize. When you see the yellow light, you have 1 minute left. I would appreciate it if you would conclude when the red light appears.

We have a very full schedule, and I want everybody to have an opportunity to be heard. It is not a matter of convenience for the chairman as much as it is assure that everybody who has come here, who has made the effort to be here, will have a full hearing.

STATEMENT OF DANIEL J. KEARNEY, VICE PRESIDENT, FIRST DISTRICT, AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

ACCOMPANIED BY JOHN McKEON, PRESIDENT OF LOCAL 948, AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES, NCFLL, AFL-CIO

Senator WEICKER. Our next witness is Dan Kearney, and I know that Dan Kearney is here because I have seen him, the national vice president of the first district, American Federation of Government Employees.

Mr. KEARNEY. I am submitting my testimony that I sent in for the record, and I would just like to mention a few things.

The Labor Department says that we are going to save $10 million by closing or moving so-called overhead to New York, Denver, and San Francisco. We have tried to get the basis for those figures. Finally, the representative of the Labor Department has said that those figures came directly out of the Grace Commission report.

I asked him, what about the figures that were provided by the Congressional Budget Office and the GAO which, if they were applied proportionately, would reduce the savings to $2.1 million, or about $700,000 an office.

We have not been able to get any direction as to how they are going to handle the cases that we are concerned with, workers' compensation, for instance, if they move the apparatus and the decisionmakers to New York. They have no answers for that.

How much time and money will be spent on travel from New York to the field to supervise those people who are already there? Furthermore, access to the people will be cut. It will be just more difficult to appeal or to talk to the management, so-called, in Boston. While Boston is only 210 miles, I have talked to folks in northern Maine, which is about 200 odd miles from Boston, and they are disturbed and concerned because an entity that they have been dealing with for so many years is not going to be there any more.

I predict that if this happens, the rest of the agency will continue to diminish its ranks in New England.

I would like to ask John McKeon to make a statement, if he wishes.

Senator WEICKER. Go right ahead.

Mr. McKEON. Thank you, Mr. Chairman.

Mr. Chairman, I appreciate the opportunity to appear before this committee to discuss the Department of Labor's proposed small region initiative. I would like to give you my perspective of the small region initiative as the representative of the Department's employees in the Boston region.

We believe that this proposal is ill-advised and ill-conceived. The Department of Labor has stated that the impetus behind the small region initiative is the Grace Commission. It appears the Department has no internal study or research on which to base this decision.

We have reviewed that portion of the Grace Commission report which deals with reorganization of regional offices in the Department of Labor, and frankly we believe that they have missed the point completely.

The Grace Commission has apparently made its recommendations predicated on the hypothesis that all 10 existing regions are equally efficient and productive since there is no mention of the efficiency and productivity in the report. We hear Mr. Grace constantly harping in the media about increasing efficiency in Government, but there is no indication that the efficiency of the current region was ever considered.

Is it sound management to overhaul a support system, such as the DOL regional structure, without determining which parts of the whole are operating efficiently and why they are efficient prior to instituting changes?

We acknowledge that economies of size exist as an area of potential savings, but we also believe that it is important to consider other factors in the decisionmaking as well. We believe that the productivity and efficiency of the existing regions, the geographic size of the regions, and the work force population of the region are factors of equal or greater importance to regional office staff size.

If the span of control is narrow in a so-called small region, and that region is more productive or efficient than another large region with a broader span of control, perhaps DOL should consider decreasing the span of control in the larger region rather than eliminating the smaller regions.

It appears to us, based on information made available, therefore, that DOL has made the decision to close the Boston, Kansas City, and Seattle regional offices without considering factors that we believe are important in accomplishing the mission of the Department of Labor—providing basic worker protection to the working men, women, and children of the United States.

In conclusion, let me again thank the committee for the opportunity to address you today and urge you to consider most carefully the costs in loss of service and productivity of the Department's proposal, as well as the Department's projected savings.

Senator WEICKER. Thank you very much.

You have heard Senator Pell testify, he is very much involved with it, and I am very much involved with it. We have been in communication with the Department, and we will do the best we can. In other words, I agree with your arguments and your conclusions, and we will see how we can get the executive branch to head off in the right direction.

Mr. **Kearney**. I would like to add that we are very much concerned about two divisions of the Labor Department, the wage and hour, and OSHA. If we begin to lose the authority in the first district, those are two programs that are going to suffer. There will not be any regulatory agency, if this keeps on, and I think that Congress has to look at that.

PREPARED STATEMENTS

Senator **Weicker**. Thank you very much. Your words always bear a great weight. We will insert your statements in the record.

[The statements follow:]

STATEMENT OF DANIEL J. KEARNEY

Government of the people, by the people and for the people was, in 1776, the watchword and guide followed by our founding fathers. In 1985, that eloquent and noble statement was sadly and dramatically altered to omit the most important words "the people". Instead, we are following the proposals of corporations in the Grace Commission Report. Under the guise of cost effectivenessness and management efficiency, ill-considered and badly planned actions are being taken which would seriously erode access to and response from the Government on the part of the people and their elected representatives. The most shameful and pervasive example of this phenomenon is the action being proposed by the Grace Commission, by OMB and the Department of Labor in either seriously reducing or eliminating completely the presence of their programs in Boston, Kansas City and Seattle. There has been no substantive and careful study with apparently no concern for the impact of its decision on the citizens of the affected regions. The Department management has launched an ill-conceived plan without any real studies as to whether the move was cost effective. Such a decision should be made on the basis of careful objective analysis of the workload, the delivery of legislatively mandated services and the right of citizens to have equal access to such service from their Government.

The Department of Labor has made conflicting statements to the Employee's Union and the Congress as to its plans. They are:

1. DOL has told Congress that "No DOL agency will completely eliminate its presence from the regions involved" on one hand; while on the other hand, in a letter to the Union, it maintained that ETA did not plan to have any management presence in the Regional Offices in Boston, Kansas City and Seattle. They also advised that all these offices will be closed by October 1985.
2. In further conflicting statements, DOL indicates it will eliminate 17 positions in ETA, Boston while, in fact, DOL has told the Union that they are eliminating 59 ETA positions in Boston.
3. DOL has also advised Congress that it plans to transfer positions to adjacent regions. Whereas it has advised the Union that positions in Boston will be abolished and new positions will be created in New York.
4. Management has circulated to ETA employees a questionnaire entitled "ETA Outplacement Assistance-Preference Survey. The employees are being asked to select a DOL Regional Office that is not being impacted by the SRI, without any knowledge of what vacancies there may be. In addition, DOL has stated they will not pay moving expenses for everyone involved; and have not established any retention registers. The Department would select those whose moving expenses would be covered.

   The Union's position is that all moving expenses for those people impacted by the SRI should be covered. Further, selection for positions in these other areas should be by seniority.

This statement includes comments on the Employment and Training Administration, OASAM, Employment Standards Administration, which includes Wage & Hour, OSHA and Federal Employee Compensation.

Employment & Training and OASAM

DOL Management is saying that a total of 133 positions are to be eliminated or moved to New York. This claim is that mostly these are Management people and that there will be no substantial impact on staff or on the public. They have also said "no DOL agency will completely eliminate its presence" in New England.
DOL's own figures prove these statements to be untrue.

Of the 133 positions to be impacted, 98 are to be directly affected by September 30. Of these 98, 37 are to eliminated and 61 moved to New York by September 30.In those two agencies as of that date THERE WILL BE NO REGIONAL PRESENCE AT ALL!!! Those 98 people will be on the street or physically located in Times Square (at least until DOL decides to move them AGAIN when the entire New York Regional Office moves to a new location six months later as is currently planned.) These two offices thus impacted (ETA and the Department's Administrative and Management Office) WILL HAVE NO STAFF AT ALL REMAINING IN NEW ENGLAND.

A related point--DOL has also justified the move by claiming that most of the positions being eliminated or moved are administrative or staff positions, not line compliance jobs. In the case of ETA, this is patently untrue--and the plans for ETA are to eliminate or move 59 jobs, THE MAJORITY OF WHICH ARE DIRECTLY INVOLVED IN INSURING COMPLIANCE WITH FEDERAL STATUTES AND REGULATIONS. Thus, instead of having compliance work done out of the Boston Office with good proximity to projects and continuing contact between the agency and its projects, this work will now be done out of New York, most likely by entirely new people totally unfamiliar with the programs and personalities of the six New England states.

The elimination of the two offices will have a dramatic impact on service to the six New England states. In a recent survey done for Congressman Conte, DOL itself determined that these two offices (ETA and the Department's Management Offices) handle over 100,000 telephone contacts yearly. These contacts would thus be eliminated or made prohibitively expensive for the employers, workers, states, and the general public by physical relocation of these offices to New York. Thus, contrary to DOLs assertion, the impact of the vast majority of these cuts will directly and adversely impact the citizens of the six New England states.

Employment Standards Administration - Wage and Hour Division

The major function of the Regional Office is to oversee all labor enforcement statutes for the six New England states and to insure the implementation of national and regional policies.

The Regional Office is staffed with 10 employees who provide the following services not provided elsewhere in the Region.

1. The review and processing of all litigation cases in New England.

2. The processing of all Government Contract debarment cases as well as other Agency liaison in regard to such cases.
3. The processing and disbursement of all back wages due employees as a result of litigation and other debarment hearings.
4. The processing of all Special Sub-Minimum Wage certificates for handicapped workers and young people.
5. The conducting of Wage Surveys necessary for the issuance of Wage Rates on Government Contract projects for construction and services.
6. The processing of all Child Labor Civil Money Penalties.

The following shows the FY '84 Workload of the Regional functions for the Boston and New York Regions and the impact result of consolidation.

	Boston	N.Y.	% Increase for N.Y.
Staffing	10	13	+ 0
Litigation Case Processing	565	282	+200
Gov't. Contract Case Process	277	425	+ 65
Back Wage Processing	$2,400,000	$2,900,000	+ 83
Special Certificates	1048	1449	+ 72
Wage Surveys	66	64	+103
Child Labor Violations	753	523	+144
Civil Money Penalties	$ 94,000	$ 52,000	+181

The Boston Region handles 18% of all litigation cases in the U.S.
" " " " 17% of all Regional Back Wage payments.
" " " currently has 396 cases for Back Wage disbursement.
" " " currently has 17,995 employees to be paid through litigation cases.
" " " currently has a balance of $1,422,059 to be paid.
" " " assists 14,150 handicapped workers.
" " " assists 8,648 Full-time Students.

Office of Federal Contract Compliance

They enforce affirmative action requirements on Government contracts for women, minorities, handicapped and veterans. They audit manpower reports on Federal contracts to ensure that Federal contractors are not under-utilizing women, minorities, veterans and handicapped. Assist in the development of an affirmative action program. Monitor the contractors to ensure that they are complying with the program. The major function of the Regional Office is to oversee affirmative action programs involving federal contractors in New England.

The Regional Office is staffed with 10 employees who provide the following services not elsewhere provided in the region.

1. Review conciliation agreements and letters of commitment for acceptability.
2. Conduct quality audits of compliance reviews and complaint investigations.
3. Input of all statistical data into the OFCCP MIS systems.
4. Intake of all complaints.
5. Review and forwarding of all enforcement actions to the N.O.
6. Review all files and conciliation agreements involving Show Cause Letters for acceptability.
7. Issue all Preaward clearances.
8. Handle all FOIA and Privacy Act Requests.

The following shows the FY '84 workload of the Regional functions for the Boston and N.Y. Regions and the impact result:

	Boston	N.Y.	% Increase N.Y.
Staffing	10	15	+ 0
Quality Audits	55	59	+ 93
Complaint Intake	160	165	+ 97
Enforcement	4	2	+300
Show Cause Letters	20	18	+200
FOIA/Privacy Act	36	36	+100
Preawards Requests	2309	2472	+ 93
Preaward Clearances Issues	2208	2388	+ 92

The requests received for New England were for a total dollar value of over $23,000,000,000, a significant impact on the economy of the Region.

(Please note the statistical tables which dramatically prove that Boston, with a much smaller staff, is far ahead in protecting the workers..)

Office of Workers' Compensation

Compensation cases are the most difficult to resolve fairly. This is a problem with private sector employees that come under workmens' compensation programs in the six New England states. Federal employee's compensation programs are more difficult because one office (in Boston) covers Federal employees from Madawaska, ME to Bridgeport, CT.

Federal compensation cases are resolved much more easily through the Boston Office. The resolutions can be made by inhouse, onsite by the claimant, their attorneys or their union representative. The New England Congressional Delegation also assists constituents by daily contacts with compensation offices.

The Office of Workers' Compensation programs cover the following employee groups:

(a) 75,000 Federal employees in New England
(b) 25,000 Postal employees and;
(c) approximately 35,000 employees covered under the Longshoremen's Act. i.e. Bath Iron Works, General Dynamics and other waterfront workers.

The Boston Office would be severely impacted if the planned reorganization is carried out. Further, the New York Office of workmens' comp has a poor performance record in accordance with information that we have received. To further impact the New York Office would be a disservice to Boston and certainly to New York. AFGE's 1st District Office and the Postal Workers have been working together with OWCP Management to improve the response time to workmens' comp cases. This past year has seen the following:

(a) A review of pending cases each quarter brings together representatives of the Portsmouth Naval Shipyard and OWCP officials to find out how to improve service.

(b) Veterans Administration-I know it is unbelievable but there is a greater rate of accidents in VA Hospitals than there are in such installations as shipyards. (There are 10 hospitals in New England). The officials of OWCP in Boston have been working diligently with the unions and VA Hospital Management to improve processing of claims.

(c) There has been giant steps taken to improve worker rehabilitation after an accident. Again the Unions, OWCP and Agency Management have been working closely to bring people back to work even if it is not the job that they left. OWCP, Boston has been generating a great deal of interest in a program that not only brings the injured employee back to work, but saves the Government a great deal of money.

Certification and release of payments which require the approval of the Deputy Commissioner will be greatly delayed due to the need to physically transfer the file to New York or to await a visit from the New York Deputy Commissioner. The same is true for certain other compensation orders.

OWCP programs require constant and diligent oversight to assure proper processing of claims and security for the expenditure of millions of dollars in employee benefit and medical costs. Consolidation would remove from the District Office high level management positions which are critical to the auditing, integrity and quality assurance of claims payments and the security of the ADP systems through which these payments are made.

STATEMENT OF JOHN L. MCKEON

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to appear before this Committee to discuss the Department of Labor's proposed Small Region Initiative. I would like to give you my perspective of the Small Region Initiative as the representative of the Department's employees in the Boston Region.

We believe that this proposal is ill-advised and ill-conceived. The Department of Labor has stated that the impetus behind the proposed Small Region Initiative is the Grace Commission and it appears that the Department has no internal study or research on which to base this decision.

We have reviewed that portion of the Grace Commission Report which deals with Reorganization of Regional Offices in the Department of Labor and frankly we believe that they have missed the point completely. The Grace Commission has apparently made its recommendations predicated on the hypothesis that all ten (10) existing Regions are equally efficient and productive since there is no mention of the efficiency and productivity in the report. We hear Mr. Grace constantly harping in the media about increasing efficiency in Government, but there is no indication that the efficiency of the current Region was ever considered.

Is it sound management to overhaul a support system, such as the DOL Regional structure, without determining which parts of the whole are operating efficiently and why they are efficient prior to instituting changes.

We acknowledge that economies of size exist as an area of potential savings, but we also believe that it is important to consider other factors in the decision-making process as well. We believe that the productivity and efficiency of the existing Regions, the geographic size of the Regions and the workforce population of the Region are factors of equal or greater importance to Regional Office Staff size. If the span of control is narrow in a so-called Small Region, and that Region is more efficient or productive than another larger Region with a broader span of control, perhaps DOL should consider decreasing the span of control in the larger Region rather than eliminating the smaller Regions.

It appears to us, based on information made available, therefore, that DOL has made the decision to close the Boston, Kansas City and Seattle Regional Offices without considering factors that we believe are important to accomplishing the mission of the Department of Labor - providing basic worker protections to the working men, women and childred of the United States.

In conclusion, let me again thank the Committee for the opportunity to address you today and urge you to consider most carefully the costs in loss of service and productivity of the Department's proposal as well as the Department's projected savings.

CONGRESSIONAL WITNESS

STATEMENT OF HON. BEN BLAZ, DELEGATE, TERRITORY OF GUAM

Senator WEICKER. We will now hear from the Honorable Ben Blaz, the Delegate from the Territory of Guam.

Congressman, good to have you here. Why don't you come on up, we will be delighted to receive your testimony.

Mr. BLAZ. Thank you very much, Mr. Chairman. I am pleased to be here. This is my first opportunity, I am sure you know why I am here. I realize that we have a deficit, but I have come to make a special plea on behalf of the circumstances of Guam and its peculiar situation in that over 37 percent of the students in the territory of Guam are children of military or Federal employees. As a result of that, we have a unique situation.

Let me read my statement, Mr. Chairman, if I may.

Senator WEICKER. Go ahead.

Mr. BLAZ. I am pleased to be here to appear before your subcommittee to present testimony on the Department of Education budget requests for fiscal year 1986 on those items which affect the territory of Guam.

As you are aware, sir, title I of Public Law 81-874, the Impact Aid Program, authorizes financial assistance for the maintenance and operation of schools systems that are financially burdened by the activities of the United States.

Guam has a large population consisting of public civil servants and Armed Forces personnel, and their families. To date, over one-third of all Guam public school children have parents who are federally connected.

For the year 1984-85, a total of 9,683 children are dependents of military personnel or of federally employed parents. This combined number represents 37 percent of the total 25,895 public elementary, middle, and high school children.

This fiscal year, it will cost Guam over $2,000 per pupil to educate these school children, excluding bus transportation. Under the Impact Aid Program, Guam receives an average reimbursement of $211 or 11 percent of what it actually costs the Government of Guam to educate a student on the island.

Mr. Chairman, the fiscal year 1986 budget for the Department of Education as submitted by the President provided no funds for category "b" children, those children who reside or whose parents work on Federal property or are in the armed services. The rationale given by the administration for the elimination of funds for "b" children is that the "presence of these children imposes little or no burden on most districts." Perhaps this is true for most districts, but it has a severe adverse effect on the territory of Guam.

Guam doesn't have the financial resources to absorb the cost of educating the category "b" children. Moreover, Federal Government properties are exempt from local taxation and as a consequence the Government of Guam loses approximately $5 million annually in property taxes.

I am appealing to you for favorable consideration in restoring these urgently needed funds for category "b" children. Guam's entitlement alone for this program is $2,050,000 annually.

Public Law 95–561 authorized the establishment of the Territorial Teacher Training Assistance Program to correct one of the serious deficiencies of the school systems in the flag territories, the lack of fully qualified local teachers. With the appropriations provided by your committee, the program has had significant success in improving the ratio of local to imported teachers in Guam and other insular areas.

The administration, regretfully, does not request any funding for fiscal year 1986. I also seek your support and consideration to maintain funding of the Territorial Teacher Training Program at fiscal year 1985 level of $2 million.

Thank you for allowing me the opportunity to give my testimony. I will be glad to answer any questions you may have.

Senator WEICKER. Congressman, thank you very much. We are taking a look at those items, and we appreciate your coming here and advising us of the situation. Your submitted statement will be inserted in the record at this point.

Mr. BLAZ. Thank you, Mr. Chairman.

STATEMENT OF HON. BEN BLAZ

Mr. Chairman and members of this esteemed subcommittee, I am Ben Blaz, the Delegate from the territory of Guam.

I am pleased to have the opportunity to appear before your subcommittee to present testimony on the Department of Education budget requests for fiscal year 1986 on those items which affects the territory of Guam.

As you are aware, title I of Public Law 81–874 (Impact Aid Program) authorizes financial assistance for the maintenance and operation of schools to local educational agencies on which activities of the United States have placed a financial burden. Guam has a large consumer population consisting in part of civil servants and armed serves personnel and their families. To date, over one-third of all Guam public school children have parents who are federally connected. For school year 1984–85, a total of 9,683 are dependents of military personnel or of federally employed parents. This combined number represents 37 percent of the total 25,895 public elementary, middle, and high school children. This fiscal year it will cost Guam over $2,000 per pupil to educate these school children, excluding bus operations. Under the Impact Aid Program, Guam receives an average reimbursement of $211 or 11 percent of what it actually costs the Government of Guam to educate a student on the island.

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Thank you for allowing me the opportunity to give my testimony. I will be glad to answer any questions you may have.

NONDEPARTMENTAL WITNESSES

DEPARTMENT OF LABOR

STATEMENT OF HAROLD WRIGHT, PRESIDENT, INDIANA FARMERS UNION, MEMBER, EXECUTIVE COMMITTEE, NATIONAL FARMERS UNION

Senator WEICKER. Our next witness is Mr. Harold Wright, president, Indiana Farmers Union, member, executive committee, National Farmers Union.

Mr. WRIGHT. Thank you, Senator Weicker. It is an honor for me to have this opportunity to appear before your committee.

I am Harold Wright, president of Indiana Farmers Union and member of the executive committee of National Farmers Union, which is the board of directors of Green Thumb, Inc., which is sponsored by the National Farmers Union. I am here to speak on behalf of continuing and expanding title V of the Older Americans Act.

You have my formal testimony, which I want to present for the record.

Senator WEICKER. It is in the record in its entirety.

Mr. WRIGHT. I will summarize and talk like a farmboy from Indiana, his reaction to our Green Thumb Program, and title V.

I think there is a definite need at this time for this type of program, the same as it was when Green Thumb was started in 1965. I think the need was created because in the 1960's we experienced a mass migration of our citizens from the rural areas into the metropolitan areas. I think we should note that this migration was not necessarily voluntary. It was done on an individual basis, but it was done primarily of economics. We had low farm prices at that time. The farmers were forced off of the land, and those that were staying were receiving a lower income than they should receive. This left people very vulnerable.

With the velocity of our economic situation in the 1960's, we found that there were a lot of people living at below the poverty level, and this was the reason that our Green Thumb Program was initiated. It has expanded over the years because of this need, and I think that it has done a good job.

I think that the need still exists today. We are all aware of the economic situation that we have in rural America today. We are finding more and more of our rural citizens falling below the poverty level. I think that one of the things that this program has done that is real important is the fact that it has given these people back their self- respect and their sense of contributing something to the community.

We hear all the time that people like to be on welfare, and they don't try to get off of it. It has been our observation, in Green Thumb and in operating other programs, that this is not the case at all. People want to be needed. They like to think that they are contributing something to their community, and in doing this they have their self- respect. I think, other than the economic substance, that is about as important as anything.

The way the situation is today, with the depression in rural America, and this is not only in agriculture, but it is going into the smaller towns, and even some of the major areas now, this program has served a very useful purpose. It is needed as much today as it was back in the 1960's when we started it.

Another point, I think, needs to be made. I think a lot of times we get carried away by statistics. They can be misleading at times. We talk about averages. My daddy told me once, you can put your feet in the deep-freeze and your head in the oven, I guess that at about the middle where your belly is, you are going to be average. I think that this is what we find when we look at these average figures.

It is reported that the average income in the United States today is about $20,000 a year, which sounds like a person really ought to be able to live fairly well on that type of an income. But, then, you look at the number of people we have in this country, and we find that there is a very substantial part of those people who live below this average income. It is my observation that $5 to $6 an hour would probably be the average wage in this country. If you multiply that by the working hours in a year, and you are in the $10,000 income level rather than the $20,000 income level. It is kind of hard to lay anything back for your old age, or your retirement, and if you have some medical problems, or something like that, anything that you do lay back is virtually eliminated in a very short period of time.

I think that there is a very definite need for these types of programs. We are proud of having the privilege and the opportunity to operate our Green Thumb Program over the years. We want to commend this committee and the administration. They have included this in their budget, and we are certainly pleased that the President saw fit to continue the program. We would ask that it not only be continued, but that it be expanded.

PREPARED STATEMENT

Senator WEICKER. Thank you. You are a very eloquent spokesman. We will have your statement in its entirety to review, but I thank you for your comments.

Mr. WRIGHT. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF HAROLD WRIGHT

I am Harold Wright, President of Indiana Farmers Union and Member of the Executive Committee of National Farmers Union and a member of the Board of Directors for Green Thumb, Inc. National Farmers Union is a general farm organization with 350,000 farm families spread across the heartland of America.

For most of this century, our organization has worked to better the lives of farm families and of the rural communities in which they reside. During the upheaval experienced by American agriculture following the Second World War, we were concerned about the displacement of large numbers of farm families, and a major concern centered on older people who were left with no security and little opportunity for employment or retirement income. Out of that concern came our sponsorship of Green Thumb in 1965 to provide community service jobs for older Americans.

It has been a rewarding experience to help Green Thumb grow from the original grant providing 280 jobs in four states to our present program in 45 states and Puerto Rico, to expand the concepts of the program to include older women, to continue the emphasis on serving the oldest and the most disadvantaged, to demonstrate the abilities of older workers in a wide range of jobs with host agencies, and to pioneer the training and placement efforts to help 2,700 Green Thumb workers, almost one out of every five, find permanent employment opportunities off the Green Thumb program and so made available a job opportunity for the waiting list of applicants in our state offices.

We are witnessing more devastation in our rural communities today than when Green Thumb began, and we need the Senior Community Service Employment Program even more to help with increasing unmet needs in these communities.

The Senior Community Service Employment Program, now authorized under Title V of the Older Americans Act, is funded under FY 1984 Labor-HHS appropriations with $317.3 million providing 62,082 employment opportunities through contracts administered by eight national organizations and the 50 states.

New grant agreements will be announced by the Department of Labor effective July 1, 1985, to distribute funds provided by Congress in the FY 1985 Labor-HHS appropriations which includes a small increase to bring totals to $326 million which will increase the number of jobs available to 63,784. We appreciate the continuing support of Congress, and particularly of this Committee which last year recommended a funding level of $335 million.

When Congress reauthorized the Older Americans Act if 1984, you increased the authorization levels for the older worker program to $335 million for FY 1985 and $351.4 million for FY 1986.

We are heartened by the support demonstrated by President Reagan for this older worker program shown through the inclusion of $326 million in the President's budget which was submitted to Congress in February. This support is most welcome and appears to recognize the contribution which Title V makes to the safety net of not only older people working on the program but also the services they deliver to other disadvantaged members of their communities.

We believe that the safety net which was built through the 1960s and 1970s to provide some minimum protection for our most disadvantaged citizens must be maintained as an important part of national policy. The basic protection of Medicare and Medicaid, federal aid to education, the Voting Rights Act to expand the franchise of all our citizens, the Head Start program and the scholarships and loans for college students, the grants, loans and training programs for doctors and other health professionals, the broad range of assistance for low-income housing, have all strengthened the fabric of our nation.

But I would remind you that while we have weatherized more than a million homes, there are still 12 million homes in this country which are rated as substandard. While we have expanded the food stamp program in the '70s, we still have hungry people at the same time that our farmers have more production than can be absorbed in the marketplace. And at the same time that our farmers are facing great economic difficulties, our trade deficits are threatening the well-being of our economy.

Some of those references may seem far afield from Green Thumb and the older worker program, but the assistance provided by our workers keeps many elderly nutrition programs serving dinner and some social contact to our isolated older people. Many of our workers help overburdened teachers and school lunch programs pressured by rising operation costs. They also help to paint and refurbish small school districts that are operating on a declining tax base because bankrupt farmers are not high taxpayers.

There has been some talk that older people have caught up with the rest of society in terms of economic security. Certainly the Congress over the years has done much to bring additional protection to our older people through the indexing of Social Security coverage, the development of Medicare and Medicaid, the other programs under the Older Americans Act which helps to make available nutrition assistance, transportation programs, and a variety of other services.

But the record shows that not all our older people are well off. If the percentage who are living in poverty has stabilized, it is in part because other sections of our population have increased their slide into poverty. There are a good many who have fallen through the safety net. As funding for local support programs continues to tighten, the importance of having a cadre of experienced older people ready and anxious to work is an important reserve which can be called on. We believe this program needs to be expanded whenever resources permit.

Over the years, various studies have pointed out that Title V is availabe to about one-half of one percent of the people who are eligible to participate in it. That need for employment continues. Less than 10 percent of the women now receiving Social Security have any other pension coverage. Less than 25 percent of the men on Social Security have private pensions. Many of our workers in this country work at jobs with low hourly rates and little or no fringe benefits. This is not the kind of economic opportunity that allows for building private retirement income. Although we may see an increase in the number of people who are in a position to retire with income to maintain themselves in their later years, I am afraid that an increasing number of people on limited incomes will need to continue to work to provide for their daily needs.

We are proud of the benchmark that this program has made. Green Thumb is active in over 1,900 counties. Nineteen percent of the enrollment is minority, 61 percent is female, and 84 percent consists of individuals who live at or below the poverty level. In one state, over 15 percent of the participants had zero income before coming to work on the program.

Over 9,000 host agencies, either local branches of government or 501(c)(3) non-profit organizations, make in-kind contributions by their sponsorship of workers provided to them under the Senior Community Service Employment Program. No formal research has been carried on to tally the contributions to the local communities and their citizens who are assisted by this program. We do not have a count on the number of meals delivered, or the number of rides provided to senior citizens, or the miles of trails and parks which have been developed, or the hours of assistance provided to local libraries and schools, to senior citizen centers and community-based nursing homes.

We do know that the needs of workers and their communities continue and, with the continuing bipartisan support of Congress, the Title V program will continue to fill those needs.

We want to commend and thank the members of this Committee for their strong commitment to this program in the past which has been crucial in its growth and stability. We ask for your continued support in providing funding for the Senior Community Service Employment Program.

Thank you.

STATEMENT OF JOHN J. GUNTHER, EXECUTIVE DIRECTOR, U.S. CONFERENCE OF MAYORS

Senator WEICKER. Our next witness is Mr. John J. Gunther, executive director of the U.S. Conference of Mayors.

Mr. Gunther, we are delighted to have you here. Please go ahead with your testimony.

Mr. GUNTHER. Thank you, Senator.

I am John Gunther, executive director of the U.S. Conference of Mayors, and the conference represents cities in the United States with populations of 30,000 and more.

I appear here this morning on behalf of the Nation's mayors to urge you to adopt a fair and balanced approach to the Federal budget as you make decisions regarding many programs of critical importance to the people of our cities.

When the proposed Federal budget was sent to Congress by the President earlier this year, the conference analyzed it to show how our cities would be affected. What we found at that time was alarming—the elimination or reduction of nearly every Federal investment of benefit to cities, the complete loss of tested, effective programs like revenue sharing, urban development action grants, public transit block grants, Job Corps, the community services block grant, and the Legal Services Corporation; and deep cuts in other programs of great importance to us in community development, housing, economic development, employment and training, health programs, and higher education.

When this revolutionary Federal budget was released, we embarked on a series of meetings in major cities across the country—Chicago, Boston, Atlanta, San Francisco, New York, and Phoenix. In each meeting, mayors from cities of all sizes came together in a bipartisan way. Some expressed concern, some alarm, and some anger. But virtually all expressed strong opposition to what has been proposed for their cities and the people in them.

While these meetings were occurring the conference asked even more mayors to look at the Federal budget and tax proposals and to determine how their individual cities would be affected. One hundred and fifty-seven cities in 42 States, Puerto Rico, and the District of Columbia told us what would happen if the President's proposals go forward. I would like to submit a copy of that study: "The Impact on America's Cities of the Administration's Federal Budget for Fiscal Year 1986," for the record.

Senator WEICKER. That will be included in its entirety in the record. I will take a look at this study myself. In this survey, you are talking about many of these things and their impact on the cities.

Mr. GUNTHER. The cities really did a very good job, Mr. Chairman, in going in and looking at each of their programs. Some of them are almost as thick as the Sears & Roebuck catalog in the detail. They have really shown how it is going to affect them at the local level. Here are the highlights of that survey.

Over 80 percent of the respondents said the proposed elimination of the Job Corps and cuts in the Summer Youth Employment Program and Dislocated Worker Program would have an adverse or very adverse effect on their cities.

The administration's proposal to cut the Medicaid Program would reduce locally available health services or the number of people who receive health care in 70 percent of the cities responding. In almost all of these cities, both services and people served would be cut.

This survey brings a disturbing picture into clear focus. In city after city, the urban programs that have rebuilt neighborhoods, created jobs, and provided shelter are at risk. Public safety, transportation, and the urban infrastructure are all facing setbacks.

An enormous financial burden is being shifted from our National Government to the people of America's cities. It is being shifted to local governments which already face high tax burdens, or which have nowhere to turn for additional tax revenue because of State limitations. Where there are no revenues there are no options. Our vital urban programs and services will be cut or eliminated.

The Nation's mayors want to contribute to solving the deficit problem. But they cannot, and will not, support a solution that comes at the expense of the vast majority of the American people, the people of America's cities.

Through a special vote of our executive committee, the conference has endorsed a freeze for at least 1 year on all nonmeans tested programs in the Federal budget and increased Federal revenues from measures other than the personal income tax which would be devoted exclusively to deficit reduction.

As you set appropriation levels for the many key programs within this subcommittee's jurisdiction, we urge you to consider their approach. With it, we can achieve a fair Federal budget.

Thank you, Mr. Chairman.

PREPARED STATEMENT

Senator WEICKER. Thank you very much.

I have questions for response to the record by Senator Specter. Thank you for your testimony, and thank you for your documentation. We will see what we can do about it.

[CLERK'S NOTE.—No response received to date.]

Mr. GUNTHER. Thank you, Mr. Chairman.

[The statement follows:]

Statement of John J. Gunther

Mr. Chairman and members of the Committee, I am John J. Gunther, Executive Director of the U.S. Conference of Mayors. I appear before you this morning on behalf of the nation's mayors to urge you to adopt a fair and balanced approach to the federal budget as you make decisions regarding many programs of critical importance to the people of our cities.

When the proposed federal budget for next year was sent to Congress early in February, the Conference analyzed it to see how our cities would be affected. What we found at that time was alarming -- the elimination or reduction of nearly every federal investment of benefit to cities: The complete loss of tested effective urban programs like General Revenue Sharing, Urban Development Action Grants, public transit block grants, Job Corps, the Community Services Block Grant, and the Legal Services Corporation; deep cuts in community development, housing, economic development, employment and training, health programs, and higher education.

When this revolutionary federal budget was released we embarked on a series of meetings in major cities across the country -- Chicago, Boston, Atlanta, San Francisco, New York and Phoenix. In each meeting, mayors from cities of all sizes came together in a bipartisan way. Some expressed concern, some alarm, and some anger. But virtually all expressed strong opposition to what has been proposed for their cities and the people in them.

While these meetings were occurring the Conference asked even more mayors to look at the federal budget and tax proposals and to determine how their individual cities would be affected. 157 cities in 42 states, Puerto Rico and the District of Columbia told us what would happen if the federal proposals go forward. I would like to submit a copy of that study, The Impact on America's

Cities of the Administration's Federal Budget for Fiscal Year 1986, for the record.

The survey findings confirm in the strongest of terms what we have been saying since this budget was released: For the cities of America, for the people of America, this budget simply will not work. It will trigger serious disruptive problems in cities throughout this nation. It will force local taxes and fees to grow -- in the cities where that is even possible -- and it will force local public services to shrink. Job opportunities will be lost, and so will investment dollars.

Here are a few of the highlights of this survey for programs under the jurisdiction of this Subcommittee:

- Over 80 percent of the respondents said the proposed elimination of the Job Corps and cuts in the summer youth employment program and dislocated worker program would have an adverse or very adverse effect on their cities. Over 37,000 young people in 77 survey cities would be removed from jobs programs this summer by the proposed recision of $100 million in summer funds. In more than four out of five of these cities, alternative services will not be available for the young people who are affected.
- The Administration's proposal to cut the Medicaid program would reduce locally available health services or the number of people who receive health care in 70 percent of the cities responding; in almost all of these cities, both services and people served would be cut.

This survey brings a disturbing picture into clear focus. In city after city, the urban programs that have rebuilt neighborhoods, created jobs, and provided shelter are at risk. Public safety, transportation and the urban infrastructure are all facing setbacks.

An enormous financial burden is being shifted from our national government to the people of America's cities. It is being shifted to local governments which already face high tax burdens, or which have nowhere to turn for additional tax revenue because of state limitations. Where there are not revenues there are no options: Our vital urban programs and services will be cut or eliminated.

The nation's mayors want to contribute to solving the deficit problem. But they cannot -- and will not -- support a solution that comes at the expense of the vast majority of the American people, the people of America's cities. Through a special vote of our executive committee the Conference has endorsed a freeze for at least one year on all non-means tested programs in the federal budget and increased federal revenues from measures other than the personal income tax which would be devoted exclusively to deficit reduction.

As you set appropriation levels for the many key programs within this Subcommittee's jurisdiction we urge you to consider this approach. With it we can achieve a fair federal budget.

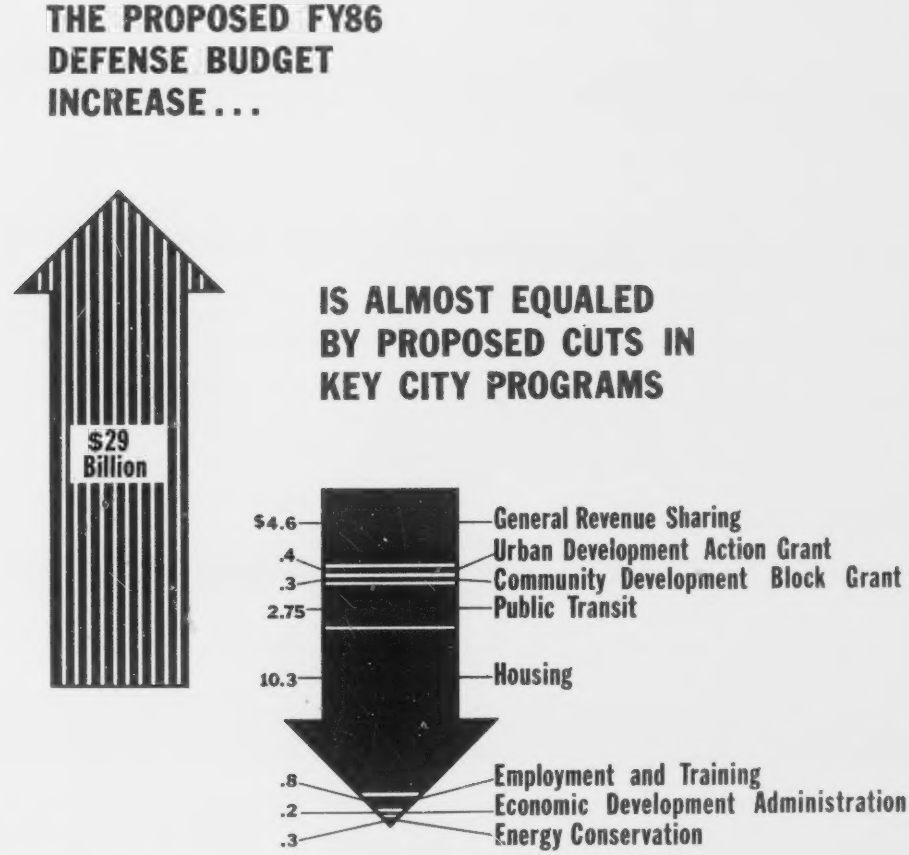
Thank You.

THE IMPACT ON AMERICA'S CITIES OF THE ADMINISTRATION'S FEDERAL BUDGET FOR FISCAL YEAR 1986

INTRODUCTION

Background

The proposed federal budget for Fiscal Year 1986 was sent to Congress by the President on February 4. A detailed analysis of the budget document was published by the U.S. Conference of Mayors on February 7. That analysis indicated that the budget "proposes to eliminate or sharply reduce nearly every federal urban program of significant benefit to cities."



Source: U.S. Budget

The Administration's budget proposal contains significant increases in defense spending on one hand, and significant decreases in domestic spending on the other. For FY86, grants to states and localities would drop by $20 billion, or 18 percent. Using FY81 as a base year, federal grants to state and local governments, after accounting for inflation, will have dropped 50 percent by FY86. For the key federal programs of direct benefit to cities, the drop from FY81 to FY86 would be 80 percent in real dollars, not accounting for inflation.

In a press conference called to release the federal budget analysis, New Orleans Mayor Ernest Morial, President of the Conference of Mayors, highlighted the proposed actions of greatest concern:

- "The General Revenue Sharing program would be eliminated in Fiscal '86. Revenue Sharing is a fundamental component of most city budgets. Its loss would trigger wide-ranging and disruptive cuts in the most basic public services, such as police and fire protection, and would force some local tax increases. The proposal to end revenue sharing next year comes as a shock to mayors who believed that the Administration would stand behind this program.

- "Community Development Block Grants would be reduced by about 23 percent for entitlement cities. This would occur as a result of cuts and modifications in the way funds are distributed to cities.

These funds are considered essential by the cities which use them in so many ways to develop neighborhoods and create new opportunities for our citizens.

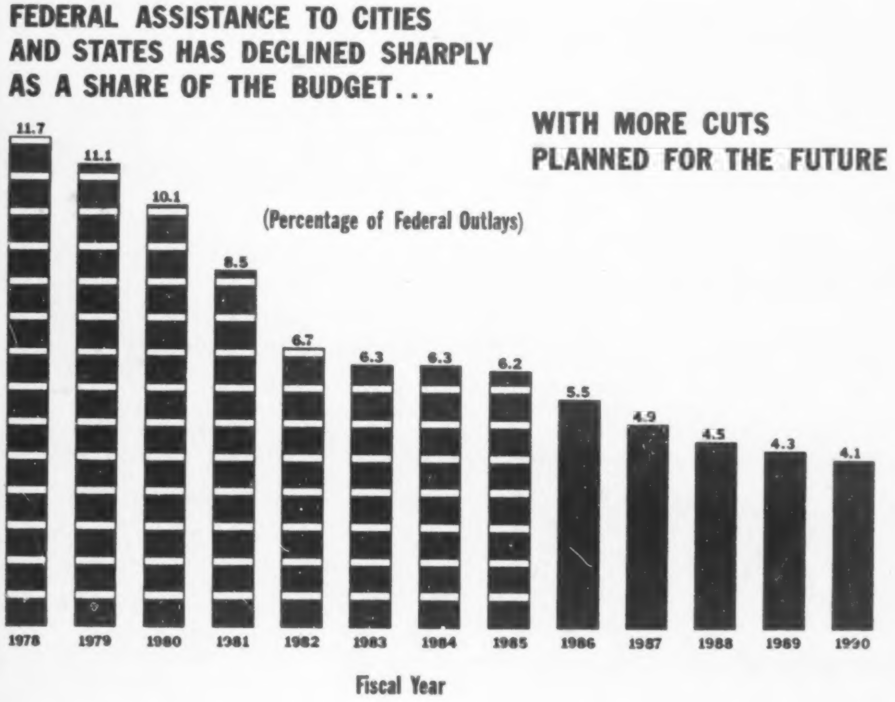
- "Urban Development Action Grants would be eliminated. These grants are tested, effective tools to leverage large amounts of private development money in our cities. Each UDAG dollar stimulates $6 in private investment at the local level.

- "Housing assistance funds would be cut from nearly $11 billion this year to less than a half-billion dollars next year, and there would be no new housing assistance funds of any kind for next year or the year after. Our low income and elderly citizens would be hard hit by this proposal.

- "Public transit would be cut $2.75 billion -- two thirds of the total federal effort. The public transit block grant which provides most capital and operating assistance would be completely eliminated, resulting in service cuts and some shutdowns in cities.

- "Youth and jobs programs would be cut several ways. Summer jobs for disadvantaged youth would be cut in this Fiscal Year and again in Fiscal '86. About $900 million would be cut from the Job Training Partnership Act. The Job Corps, the Work Incentive program and others would be eliminated altogether.

- "Direct loan programs would be cut in half, a credit loss of nearly $28 billion. The Small Business Administration, the Economic Development Administration and other major programs would be completely eliminated. Low rent public housing loans would drop from over $14 billion to less than $2 billion.



FEDERAL ASSISTANCE TO CITIES AND STATES HAS DECLINED SHARPLY AS A SHARE OF THE BUDGET...

WITH MORE CUTS PLANNED FOR THE FUTURE

Source: U.S. Budget

- "A $4 billion Medicare cut and a $1.1 billion Medicaid cut would place heavy burdens on those needing health care and on the cities responsible for Medicaid, public hospitals and other health services.

- "Despite increasing numbers of hungry and homeless citizens, and despite increasing demand for emergency human services, there would be no funds to continue the emergency food and shelter programs, and special commodity distribution programs would be discontinued as well."

The Survey

Because of the scope and the depth of the budget actions proposed by the Administration, Mayor Morial, following consultation with the organization's Executive Committee, directed the Conference of Mayors staff to assess the impact that the proposals would have on cities across the country.

On February 15 a questionnaire was mailed to a sample of more than 400 mayors of cities over 30,000 in population -- about half of all cities this size in the nation. The Conference of Mayors represents cities of 30,000 and above.

The questionnaire sought information on impact of proposed program terminations and cuts in nine areas:

- General Revenue Sharing
- Community Development Block Grants
- Urban Development Action Grants
- Public Transit
- Wastewater Treatment Construction Grants
- Assisted Housing
- Loan Programs
- Employment and Training
- Health

It also sought information on:

- Ability of city governments to raise local revenues to compensate for federal budget actions;
- Likelihood that state governments would provide funds to compensate for federal cuts;
- Current surplus/deficit situation in city budgets;
- Impact of Treasury Department tax reform proposals on city projects and services.

Mayors were asked to return completed questionnaires to the Conference by February 25; data were accepted by the Conference through March 4. A total of 157 cities responded to the survey. The responses came from cities in 42 states and Puerto Rico, and from the District of Columbia.

MOST MAJOR CITY PROGRAMS ARE ELIMINATED OR GREATLY CURTAILED BY THE PROPOSED FY86 BUDGET

General Revenue Sharing

Urban Development Action Grants

Economic Development Administration

Job Corps

Housing Rehabilitation

Low-Income Housing

ELIMINATED

Community Development Block Grant -- 10% CUT, plus

Public Transportation -- 66% CUT

Employment and Training -- 22% CUT

Energy Conservation -- 88% CUT

Source: U.S. Budget

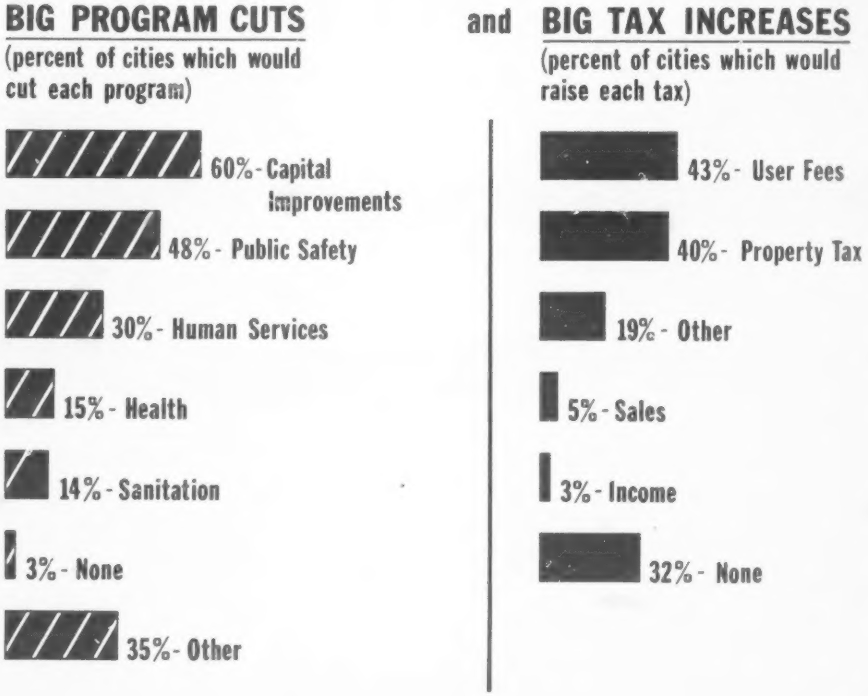
Summary of Findings

The sections which follow in this document present the findings of the survey in each of the program, revenue and tax areas listed above. Following are highlights of these findings.

General Revenue Sharing

If General Revenue Sharing is eliminated as proposed in FY86, 97 percent of the cities responding to the survey would cut services. Capital improvements would be cut by 60 percent of the cities; public safety would be cut by 48 percent. In addition, 68 percent of the respondents predicted some type of local revenue increase to compensate for the loss of the revenue sharing funds. In 43 percent of the cities user fees would be increased; 40 percent would increase property taxes. Only five percent of the cities expect any state aid to compensate for the revenue sharing loss.

ELIMINATION OF GENERAL REVENUE SHARING MEANS....



Community Development Block Grants

A 23 percent cut for Community Development Block Grant entitlement cities would result from the Administration's proposed cut of 10 percent in CDBG funds and proposed shift in entitlement cities/small cities funding ratio from 70:30 to 60:40. Almost 93 percent of the respondents said these proposals would have either an adverse effect or a very adverse effect on their cities. While over 31 percent of the cities would make across-the-board cuts in all areas for which CDBG funds are used, most cities -- more than two out of three --would cut housing programs, and about 54 percent would cut public works and infrastructure improvements.

Urban Development Action Grants

For 70 of the cities responding to the survey, an estimated 102,000 jobs and nearly $4.3 billion in investment will be lost if Urban Development Action Grants are eliminated as proposed in FY86. Of the 292 UDAG projects now being planned in these cities, only nine would go forward without UDAG funding. Nearly three out of every four respondents said the loss of UDAG would have an adverse or very adverse effect on their cities.

IF THE PROPOSED FY86 BUDGET CUTS ARE APPROVED....

96% of planned projects based on UDAG funding will not go forward...	⬇	...with a loss of 102,000 jobs and $4.3 billion in investment
83% of cities will raise transit fares...	⬆	...with 36% of fares rising more than half
70% of cities will experience cuts in health services...	⬇	...with many to experience shifts in costs to local health departments
60% of cities would have to raise taxes to meet wastewater needs...	⬆	...with 43% rising more than 25%
More than 93% of cities will be adversely or very adversely impacted by the CDBG cut...	⬇	...with major impacts in housing, public works and economic development
Youth unemployment will rise...	⬆	...with more than 37,000 kids forced from the summer jobs programs

Public Transit

The proposed FY86 budget calls for a two-thirds reduction in transit assistance, including a total elimination of federal operating assistance and a rise in the local matching share required by the federal government. Among the cities responding to the transit question, 83 percent said that fares will increase if the federal assistance is cut. Of the cities predicting fare increases, 19 percent say that fares will at least double; another 17 percent would increase fares by more than half. In addition, three out of four cities would reduce their vehicle fleets, and 70 percent would eliminate some public transit routes. While overall transit service would decline significantly in most cities, nearly 39 percent of the respondents said that their systems would be threatened with shutdowns.

Wastewater Treatment Construction Grants

The Administration is proposing a four-year phaseout of wastewater construction grants, with a likely 25 percent reduction in each of the next four years. Almost 36 percent of the respondents said they would be unable to complete existing wastewater treatment facilities in their cities if the phaseout goes through. About half of the cities are under court order, consent decree or other binding contract to build new plants or finish existing ones in order to meet 1988 clean water standards. Sixty percent of these will not be able to meet these obligations without a significant increase in taxes or user fees.

Assisted Housing

The budget for FY86 proposes a moratorium on all new units of assisted housing. Over 88 percent of the respondents said the availability of housing affordable by low income people would be either adversely or very adversely affected by the moratorium. The proposed one-year elimination of funds for modernization would have an adverse or very adverse effect in nearly 78 percent of the responding cities. For 93 percent of the cities, waiting lists for assisted housing would lengthen because of the moratorium. On average, the waiting list for Section 8 units is more than 2 years, for Section 202 units, 18 months; for public housing units, almost two years.

Loan Programs

As proposed in the FY86 budget, the elimination of Section 312 rehabilitation loans, Section 108 community development loan guarantees, the Small Business Administration's loan programs and the Economic Development Administration's loan and grant programs would adversely or very adversely affect over 83 percent of the cities responding. Section 312 loans totaling nearly $34 million and involving well over 3500 housing units were used last year by 57.5 percent of the respondents. Section 108 loan guarantees were used by 17.5 percent of the cities. EDA loans and grants totaling more than $38 million went to 44.4 percent of the cities.

Employment and Training

Over 80 percent of the respondents said the proposed elimination of the Job Corps and cuts in the summer youth employment program and dislocated worker program would have an adverse or very adverse effect on their cities. Over 37,000 young people in 77 survey cities would be removed from jobs programs this summer by the proposed recission of $100 million in summer funds. In more than four out of five of these cities, alternative services will not be available for the young people who are affected.

Health

The Administration's proposal to cut the Medicaid program, capping federal matching payments to the states, will reduce locally available health services or the number of people who receive health care in 70 percent of the cities responding; in almost all of these cities, both services and people served would be cut. The proposal to freeze health block grants and reduce funding for various other health programs would trigger an increase in sexually transmitted disease in two out of three cities responding. Childhood disease rates would be expected to increase in 64 percent of the cities, infant mortality rates in 62 percent and tuberculosis rates in 60 percent. More than half of the cities would expect an increase in all four of these health indicators.

City Revenues

Over half of the cities responding say they would have to raise local revenues to compensate for proposed cuts in the federal budget. Most of those that would not raise revenues are constrained from doing so by state law, have high tax burdens already, or believe that approval of increases by voters, city councils or state legislators is unlikely. Increases in property taxes and user fees would be sought by most of the cities to compensate for federal aid losses in key urban programs.

State Aid

A total of 85 percent of the cities responding say they expect no additional funds from their states to compensate for the proposed federal budget cuts.

City Fiscal Conditions

More than nine out of 10 of the responding cities were forced to raise revenues or reduce services last year in order to balance their budgets. Nearly half raised user fees, 41 percent laid off workers or instituted hiring freezes, 40 percent cut services and 28 percent increased property taxes. Two out of three of the survey cities forecasting budget surpluses this year have already committed the funds to ongoing services or to the pay-back of prior year deficits.

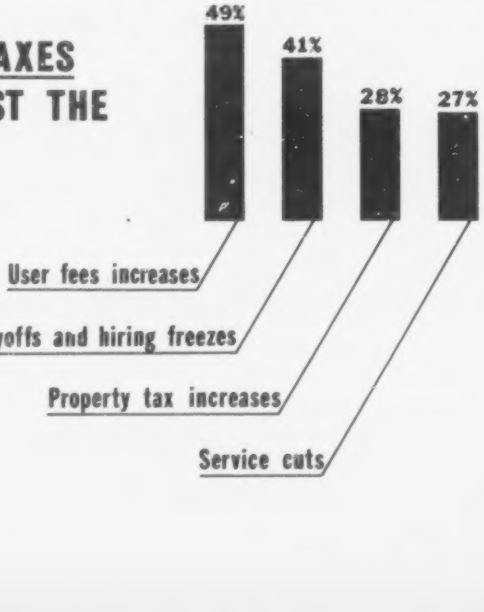
Treasury Department Tax Proposals

The response to the Treasury Department's proposed curbs on "private purpose" municipal bonds is almost completely negative, with all but one survey city citing at least one project or effort that would be negatively affected. For 87 percent of the respondents, the proposed elimination of the deductability of state and local taxes would make it very difficult to raise local taxes, would lead to declining real estate values, or would have other negative effects.

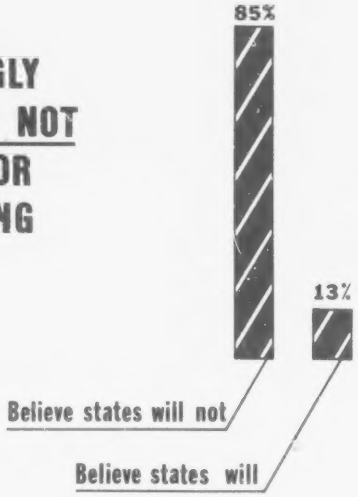
Appendices

The questionnaire used in the survey is included in Appendix A. Appendix B contains specific responses to selected questions for 50 of the survey cities. Appendix C contains a list of the cities responding to the survey and the 1980 Census Bureau population counts for them.

CITIES HAVE RAISED TAXES AND CUT COSTS IN JUST THE LAST YEAR....



CITIES OVERWHELMINGLY BELIEVE STATES WILL NOT COMPENSATE THEM FOR LOST FEDERAL FUNDING



GENERAL REVENUE SHARING

The overwhelming majority of cities responding to the survey predict major local budget cuts and tax increases if general revenue sharing is eliminated. Since 1972, revenue sharing has been incorporated into local budgets in an integral fashion, with cities using the funding for public safety, a variety of human services programs and many other vital city efforts. For survey cities, it ranges as a percent of city budgets from one to 25 percent.

Local Budget Cuts

A total of 97 percent of the respondents predict cuts in services if revenue sharing is lost.

- 60 percent say they would cut capital improvements
- 48 percent would cut public safety
- 32 percent would cut human services
- 15 percent would cut health services
- 14 percent would cut sanitation

In addition, 35 percent listed other major adjustments in expenditure levels -- cutting street and building maintenance, education programs, downtown development efforts, and transit; laying off workers and making across-the-board reductions in programs.

Local Tax Increases

Cities also said they would have to enact revenue increases to compensate in whole or in part for the elimination of revenue sharing. A total of 68 percent predicted some type of increases.

- 43 percent said that user fees would be increased
- 40 percent would increase property taxes

- five percent would increase sales taxes
- three percent would increase income taxes

Most cities do not have the authority to impose sales or income taxes.

In addition, 19 percent cited other major revenue adjustments -- increasing franchise taxes, permits and fines, utility taxes, license fees, business taxes, hotel taxes and the like.

Among the 32 percent of cities who said they would not raise taxes, many explained they could not because of state tax limitations, already very high tax burdens or the unlikelihood of getting council or public approval.

Finally, many cities volunteered other changes they thought they would be forced to make -- increasing debt financing, contracting more services to the private sector, deferring capital expenditures and personnel cuts, among others.

In response to the question as to whether cities expect any state aid to compensate for the loss of revenue sharing, fully 94 percent of the cities say they do not expect any such help. Only five percent predict that the state will reimburse them for any of the revenue sharing cut. Of the seven cities that said the state might help, most did not predict a percentage; in general, those who did believed the aid would be quite low.

COMMUNITY DEVELOPMENT BLOCK GRANT

Almost 93 percent of the cities responding indicate that the proposed 10 percent cut in Community Development Block Grant funds and change in the entitlement cities/small cities ratio from 70:30 to 60:40 would have either an adverse or very adverse effect.* Together the 10 percent cut and the ratio change would mean a 23 percent cut for entitlement cities and a possible 10 percent cut for small cities. Three cities report the effect would be minimal. Seven say there would be no effect. At least three of these do not now receive CDBG funds, however.

For a number of cities the proposed cut comes on top of other reductions in their CDBG allocation in recent years. Baton Rouge indicates its allocation has dropped $250,000 over the last three to four years. Milwaukee has already absorbed a $5 million cut in its CDBG allocation.

Peoria officials report that "community and economic development activities will be curtailed during a time of high unemployment and economic dislocation." For Washington, D.C., CDBG funds have been used to "provide assistance to those who need help. Gains made in the past would be affected and new improvements will not be available." Officials in Orem, Utah expect the major impact will be on "people programs." In Grand Forks the recent direction of the city's economic development efforts -- a new foreign trade zone -- would be changed significantly and the city's ability to create jobs would be particularly affected.

Tacoma reports that the proposed cuts would result in a loss of jobs (public and private), elimination or reduction of funding to agencies providing public services, and great difficulty in leveraging private investment. In Charleston, South Carolina "the two most run-down areas of the city have received substantial assistance in housing rehabilitation and job creation through the CDBG program....Since there is no way to raise sufficient local funding, neighborhood revitalization programs will deteriorate and begin regressing." Chicago officials report the cut would require them to close a health center, eliminate infrastructure improvements and postpone rehabilitation of 1250 housing units. Annapolis officials explain that "funds have already been targeted to construction of a badly needed senior center. Cuts will, at best, delay construction substantially and, at worst, extinguish the concept altogether."

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* Entitlement cities include cities of 50,000 population and above, the central city of a Standard Metropolitan Statistical Area, urban counties, and some cities "grandfathered" in that had entitlement status and lost it due to population changes.

Program Areas

Cities use their CDBG funds for a variety of purposes, including economic development, housing assistance, social services, and public works/infrastructure improvements. Over one-half (52.7 percent) of the cities reporting put more of their CDBG funds into housing than any other area. Forty of these cities use 50 percent or more of their allocation for housing. Public works/infrastructure improvements account for the next most common use of the funds, with one-fourth of the cities reporting that they use more of their CDBG funds in this area than any other. These areas are followed by economic development (14.2 percent), social services (4.1 percent) and other (4.1 percent), which includes items such as administration, planning, land acquisition, property maintenance, and recreation.

The two leading purposes switch when the areas in which cities put the second greatest amount of their CDBG funds are examined. Public works/infrastructure is first with 30.1 percent of the cities, and housing is second with 23.3 percent of the cities.

When asked which of these areas would most likely be cut as a result of the federal cut, officials in 45 cities (31.3 percent) report that cuts would be made across the board in all areas for which CDBG funds are used. Housing would be cut in over two-thirds (69.4 percent) of the cities responding. Public works/infrastructure improvements would be next, with 54.2 percent of the cities making cuts there. These are followed by cuts in economic development (in 49.3 percent of the cities), social services (in 43.8 percent of the cities) and other (in 28.5 percent of the cities).

State Restorations

Only two cities expect their state governments to provide funds to compensate for the proposed federal cut in CDBG.

URBAN DEVELOPMENT ACTION GRANT

An estimated 102,000 jobs and nearly $4.3 billion in investment in projects now being planned in 70 of the cities responding to this survey will not be realized if Urban Development Action Grants are eliminated. Of the 292 UDAG projects being planned in the cities, only nine are expected to go forward without UDAG funding. These that would not go ahead without UDAG funding involve an estimated $728 million in UDAG funds, $200.9 million in other public funds, and $3.6 billion in private investment, and would create or retain an estimated 102,000 jobs.

The elimination of Urban Development Action Grants in FY86 would result in an adverse or very adverse effect in nearly three out of every four cities responding. Thirty-seven cities (26.4 percent) would feel no effect, but at least 30 of these are not eligible for the program or have been unable to receive grants with the current highly-targeted selection criteria.

Several cities report on the contribution that prior UDAG projects have made to economic development and the local economy in their cities. In Asheville, North Carolina, tax valuations have increased by approximately $23.6 million. Tacoma has received five UDAGs for a total of $10.5 million, resulting in $82.4 million in private investment and $500,000 in new taxes. In Milwaukee the UDAG program "has been responsible for leveraging over $250 million in private investment, generating new local tax revenues and creating nearly 5000 new permanent jobs."

Beaumont, Birmingham, Davenport, and Peoria all discuss how crucial UDAGs are to their downtown development. In Davenport two downtown projects hinge on UDAG grants. Peoria officials report that "the city's plan for rebuilding its downtown and strengthening the devastated local economy would lose the major projects to achieve development success."

Syracuse reports that "virtually no other funding source for large new construction projects" exists. Flint points out that without UDAG "development activity would cease because only Fortune 500 companies or high income projects can support development at conventional interest rates." Jersey City officials, who term the elimination of UDAG "very, very, very adverse" for their city, are concerned that potential developers would be scared away. Louisville explains that blighted areas will have no gap financing as incentives for development. Evansville has "a number of vacant or under utilized industrial facilities for which UDAG-type funding is essential for the projects to be financially feasible."

Erie sees Urban Development Action Grants as "very important leveraging tools for major revitalization and economic development projects involving public/private partnerships." In Akron, UDAGs "are an essential part of the proposed financing of many major economic development projects....Many past developments would not have occurred without UDAGs." Baton Rouge officials state that the elimination of UDAG "would substantially undercut our abilities to leverage redevelopment efforts particularly in downtown and the inner city. Local governmental financing to fill this development gap is totally insufficient to address this revitalization effort in any meaningful way."

State Restorations

Only two cities expect their state governments to provide funds to compensate for the elimination of the UDAG program.

PUBLIC TRANSIT

Based on the survey, cities face sharply higher transit fares, fewer transit vehicles, reduced service -- and in a substantial number of cases, shutdown of their transit system -- if the Administration's proposed FY86 transit budget is enacted.

The Administration seeks a two-thirds cut in the nation's program of transit assistance. Under its proposal, the transit formula block grant program -- appropriated at $2.4 billion in FY85, would be completely eliminated. The one-cent federal gasoline tax, which yields $1.1 billion annually earmarked for transit discretionary expenditures, would be all that would remain under this proposal. Under the Administration's plan, it would be distributed by formula, replacing the current formula program. But even after this two-thirds reduction, no funding would be permitted for operating assistance or new rail starts. The required local match would rise from 20 to 30 percent.

The impacts of this proposal on cities would be stark. Although most transit in cities is operated by regional transit authorities and not by cities directly, 75 percent of cities responding to this survey were able to provide information regarding impacts on transit in their cities.

Fare Increases

Of the cities responding in the transit area, 83 percent report that fares will increase if the transit cut is passed.

Not every city can specify the precise range of the fare increase, but some 65 percent can now predict the range of increase, and these results indicate that very high transit increases would be forthcoming, as the figures below indicate:

Transit Fare Increases

Percentage Increase	Percentage of Cities Predicting Increases
1-25%	28.1%
26-50%	35.9%
51-100%	17.2%
101%-Above	18.8%

Almost 40 percent of the cities predict an increase of at least 50 percent, and about one out of five indicate that fares would at least double.

Vehicles Reductions

The proposed transit cut, which would completely eliminate operating assistance, would substantially reduce the number of transit vehicles in service. With less money to operate systems, and far fewer funds to replace worn out vehicles, cities will simply reduce fleets. Of those cities providing transit information, some 75 percent would be forced to reduce vehicle fleets, causing greater waits for service and more transit crowding and congestion, thereby reducing the overall quality of transit service.

Route Reductions

In addition to vehicle reductions, a large proportion of cities would be required to eliminate specific routes if the proposal was approved. More than 70 percent of the cities providing transit information fall into this category. Thus, whole neighborhoods or sections of cities could find transit service markedly diminished.

Service Reductions

Of those responding in the transit area, some 69 percent would be required to reduce overall transit service. But the percentage of service reduction which would be required is also revealing, as the figures below indicate:

Transit Service Reduction

Percentage Reduction	Percentage of Cities Predicting Service Reduction
1-25%	54.9%
26-50%	30.5%
51-75%	9.8%
76-100%	4.9%

All reductions of transit service have potentially serious impacts in cities. With more than 45 percent of the cities predicting overall service cut-backs of more than 25%, the mobility of U.S. transit riders is in jeopardy.

Threat of Shutdown

If the proposed transit budget cuts were enacted, most cities would deal with them through a combination of the above -- fare increases, and vehicle, route and service reductions. But for a sizable portion of cities, those measures would be insufficient to sustain their systems. Indeed, of those cities providing transit information, 38.6 percent report that their systems would be threatened with a shutdown.

New State Assistance

While the role of states in funding public transit has gradually increased in recent years, there is no belief among cities that additional state aid will be forthcoming in this area should the Administration's budget proposal be enacted. Less than eight percent anticipate new state transit aid.

WASTEWATER TREATMENT

Vastly increased local taxes and user fees, and threats to housing, community and economic development, jobs and environmental quality are anticipated in cities should the Administration's wastewater treatment proposal be enacted. The Administration proposes to phase out the $2.4 billion dollar wastewater treatment construction grants program over four years, ending eligibility now for new projects. The wastewater program, cut in half in FY81, helps cities meet federal standards under the Clean Water Act.

In most cases, metropolitan sewerage agencies, rather than the cities themselves, build and operate wastewater treatment plants. However, some 72 percent of those cities responding to the survey were able to give detailed information regarding the impact of the Administration's proposal.

Prospects for Completion of Projects

Of those cities, almost 36 percent would be unable to complete existing projects in four years if the budget proposal is enacted. With no federal assistance remaining, many cities across the nation would be left with unfinished wastewater treatment plants.

Court Orders and Decrees

Although federal funding may expire, to comply with 1988 clean water standards, many cities must finish existing plants or construct new plants because of judicial consent decrees, administrative orders or other binding contractual agreements. Of those cities providing wastewater information, 49 percent are in this category.

Tax/User Fee Increases

A clear majority of cities responding will not be able to meet their wastewater obligations without a significant increase in taxes or user fees. Indeed, 60 percent would be required to resort to significant tax increases or user fee increases to meet this obligation. The range of this local tax increase or user fee increase is difficult for most cities to currently estimate. However, some 43 percent are prepared to estimate the increases now as the figures below indicate:

Tax/User Fee Increases to Meet Wastewater Needs

Percentage Increase	Percentage of Cities Predicting Increases
1-25%	57.1%
26-50%	22.4%
51-75%	2.0%
76-100%	8.2%
100%-Above	10.2%

Thus, almost 43 percent of these cities predict tax or user fee increases of more than 25% to meet wastewater needs.

Impacts of Inability to Meet Needs

If cities cannot complete existing projects or construct new projects, this will have significant effects on housing, community development, economic development, jobs and environment quality. Wastewater treatment capacity is an essential element to achieving each of these key urban goals.

Not all cities can now provide information in this area. But of those providing wastewater information, 65 percent did provide information on the nature of these impacts. That information is summarized in the figures below.

Impact of Inability to Meet Wastewater Needs

Areas of Impact	Percentage of Cities Predicting this Impact
Housing	63.5%
Community Development	68.9%
Economic Development	77.0%
Jobs	68.9%
Environmental Quality	94.6%

Virtually all cities in this category reported multiple impacts from a failure to meet wastewater needs.

State Aid

Although funding for wastewater treatment is passed by the federal government to cities through state governments, less then four percent of cities providing wastewater information anticipate increased aid from states in this area.

ASSISTED HOUSING

Waiting lists for assisted housing are expected to lengthen in 93 percent of the cities responding, and the proposed moratorium on all new units of assisted housing will have an adverse or very adverse effect on the availability of housing affordable by low income people in nearly nine out of every 10 cities responding. Nearly one-half (46 percent) of the cities expect the effect to be very adverse; another 42.3 percent of the cities expect the effect to be adverse. Sixteen cities indicate there will be no impact.

Among the cities responding to the housing questions, 32,984 units of federally assisted housing were allocated during FY84. These include 16,175 Section 8, units, 2,494 Section 202 units, 5,344 public housing units, and 8,971 units under the rental rehabilitation program.

Units Needed

The number of new assisted units that cities need varies significantly. Evansville cites a need of 100 units annually. Caguas, Puerto Rico reports that "over 500 units of housing are needed each year to compensate housing needs in our community. Without this assistance affordable housing would be greatly affected." San Juan "has a present demand of 20,000 housing units per year. This coupled with 47.4 percent of the families below the poverty level (1980) in San Juan makes this proposal very detrimental for our city." Charleston officials comment: "Elimination of the funds would keep us from adding new units. We currently have over 1800 families on the waiting list. The two year moratorium of subsidies may make the projects unattractive for private developers." In Kansas City "the Section 8 program is about 2000 households. A moratorium on housing assistance will exacerbate this problem."

Growth Cities

Two growing cities point out particular housing needs. Reno explains that "because of current expansion in the casino industry, which employs large numbers of low income staff, there will not be housing available to meet needs." Tempe is experiencing rapid population growth, with a concomitant need for an increase in assisted housing.

Discussing assisted housing, Honolulu officials state: "That's one of our highest priority items -- a big problem already. We need more -- not less -- low income housing." Hayward officials point out that "Section 8 is the ONLY means of helping the 'truly needy' -- disabled, elderly, women and children who have been abandoned." Finally, "Grand Forks already has a long waiting list for assisted housing. Cuts in this program would impact low income people who cannot afford safe and decent housing. It would also seriously affect our efforts to revitalize the central business district through rehabilitation of existing units," according to officials in that city.

Public Housing Modernization

The one year elimination of funds for modernizing public housing projects, with limited funds available only for emergencies, would have an adverse effect on 43.2 percent of the cities responding and a very adverse effect on another 33.3 percent. Thirty-three cities (23.4 percent) report that the proposal would have no effect on their public housing.

Waiting Lists

The proposed moratorium would lengthen the waiting lists for assisted housing in 93 percent of the cities responding.

The average waiting list for Section 8 units in the cities responding is 26.3 months. Twenty-nine cities have a wait for Section 8 of three years or more. Miami and Rockford each report waiting lists of 12 years. Only seven cities have waiting lists for Section 8 of six months or less.

The average waiting list for Section 202 is 18 months. Twenty cities have a wait of 24 months or more for this program. Jamestown tops the list with a wait of 60 months, with Oak Park, Michigan, Reno and San Francisco following with 36-month waits. Twenty-one cities have a wait for 202 housing of six months or less.

For public housing the average waiting list is 23.9 months. Fourteen cities have a wait of 36 months or more for public housing, with a 10-year wait in Washington, D.C., and 106 months in Mankato, Minnesota. Seventeen cities have a waiting list of six months or less for public housing.

Housing Development Action Grants

Forty-one of the survey cities are currently planning a total of 91 projects for Housing Development Action Grants. These projects would add over 8,992 units to the existing housing stock, with 46.9 percent of them, on average, for low income people.

State Restrictions

Only four cities expect their state governments to provide funds to compensate for the proposed federal moratorium on new units of assisted housing.

LOAN PROGRAMS

The effect of the elimination of Section 312 rehabilitation loans, Section 108 loan guarantees, the Small Business Administration's loan programs and the loan and grant programs of the Economic Development Administration would be adverse in 44.2 percent of the cities responding to the survey, and very adverse in another 39.1 percent. While 23 cities indicate the elimination of these programs would have no effect, only five of these cities -- Cedar Rapids, Columbus, Dallas, Iowa City and Sunrise, Florida -- have used any of the loan programs in the last year.

Comments by the cities responding show the varied uses and the importance of these loan programs:

- Akron: "Housing rehabilitation, business loans and economic development will be severely cut back. This will have a strong negative effect on the city."
- Asheville, North Carolina: "Over 125 homeowners have been assisted with Section 312 funds over recent years. The SBA 503 program has assisted five local businesses; three loans are pending."
- Beaumont: "We use them all and rely on them."
- East Chicago: "It would curtail the city's ability to assist owners in providing standard housing for low and moderate income residents.
- Erie: "Housing rehabilitation and small business would be drastically affected."
- Flint: "Small business expansion and new business start-ups would virtually cease in non high-tech areas."
- Grand Forks: "EDA has made it possible to develop the foreign trade zone. Section 312 cuts would impact central business district redevelopment. In these days of tight money SBA is a must. All of these programs create jobs, add to the tax base and are cost effective."
- Hartford: "If SBA loans are eliminated we would not be able to run our matching program....The number of loans the City makes will be reduced as the monetary value of the loans increases."
- Jamestown: "We have heavily utilized the EDA programs to attempt to rebuild our infrastructure and would definitely be

hurt by EDA's proposed elimination. Many small business deals would also not happen if SBA were totally eliminated."

- Kansas City, MO: "Kansas City is in the midst of a revitalization program that relies on these loans. It would be extremely unlikely that the private sector could justify making loans in these areas without guarantees. Also, loss of SBA loans would be extremely harmful to economic development."

- Lubbock: "There is a critical need for this type of assistance for low and moderate income people in Lubbock."

- New Orleans: "These programs are critical to housing and economic development activity in the inner city. The city loses its ability to leverage private financing. The City-wide Development Corporation reports over $4 million SBA loans leverage over $7 million in private financing with a job impact of 1,107 jobs. EDA funds of $1.5 million generated over $4.5 million in private money for 405 jobs.

- Reno: "If SBA loans are eliminated, it will adversely affect the tax base and eliminate new jobs and business opportunities."

- Syracuse: "Economic growth would virtually cease."

Section 312

Over half (57.5 percent) of the cities responding to the survey used Section 312 loans last year. These loans came to $33.9 million and involved 3,567 housing units.

Section 108

Section 108 loan guarantees were used by 17.5 percent of the cities during FY84. Nineteen cities were able to guarantee $204 million in loans with the program.

Economic Development Administration

Loans or grants from the Economic Development Administration went to 44.4 percent of the responding cities during FY84. These came to over $38 million.

State Restrictions

Only two states expect their state governments to provide funds to compensate for the proposed elimination of federal loan programs.

EMPLOYMENT & TRAINING

Over 37,000 young people would be forced from jobs programs this summer in 77 of the survey cities because of the proposed recession of $100 million from the 1985 summer youth employment program. All of the proposed cuts in the Job Training Partnership Act -- elimination of the Job Corps and cuts in the summer youth employment and the dislocated worker programs -- would have an adverse effect on 45 percent of the cities responding, and a very adverse effect on another 35.2 percent. Twenty-four cities indicate the proposals would have no effect on their cities. All but six of these cities, however, are in large area consortiums and do not administer Job Training Partnership Act programs directly.

Several cities say the proposed cuts come on top of reductions already sustained in employment and training programs. Charleston officials point out that "a 10 percent decline has already occurred in the number of youth we can help. Continued reductions will only serve to put more youth on the street since alternate employment is not available." Cedar Rapids has the "same chronic unemployment as four years ago, with only one-fifth of the revenues available."

Peoria officials explain why the cuts would be very adverse for their city: "We are currently suffering 14 percent unemployment in real terms. Our economy is in an industry transition -- from heavy manufacturing to service type jobs. This requires more job training and relocation services to improve employment in the area." Akron officials are concerned that they will "not serve as many youth that work in the summer, generating income for their education. We have a large number of dislocated workers who will not be able to be served. These are people who won't be served by other programs." In Kansas City, Missouri, "fewer disadvantaged individuals who lack the training and skills necessary to enter the labor force will receive the training to enable them to obtain gainful employment."

A number of cities comment on the particular effect the proposed cuts would have on young people:

- Grand Forks: "The summer youth program has been very helpful. Young people have been used to cleanup a blighted area along the edge of the central business district."
- Flint: "No other program serves the 14 and 15 year olds included in the employment development service portion of the JTPA summer youth employment program."
- East Chicago: "There are no jobs available for the youth as industry is laying off more and more workers."
- Reno: "Proposed cuts in Job Corps and the summer youth employment program will not allow the city to serve disadvantaged youth properly in this area. There will be more youths on the streets with no positive force in their lives."
- Louisville: "Youth unemployment is at extraordinary proportions. Unemployment relates to crime, vandalism, arson and suicide."
- Mobile: "Cuts will probably result in a crime increase."

Job Corps

Since Job Corps sites are not administered by cities, many of those responding are unable to estimate the number of young people in their city who are served by the program. Forty-six cities did have this information, however, and they estimate that nearly 16,000 young people from those cities are served by the program. Alternative services for the young people in Job Corps would be available in just under one-third (31.9 percent) of the cities responding. In over two-thirds of the cities, such services would not be available.

Many of the comments on the effect that the elimination of Job Corps would have on the young people it serves reflect the fact that the program serves an often troubled population:

- Evansville: "They would turn to other programs which are also being cut back or they would become offenders again. (Job Corps = exoffenders)"
- Columbus: "The program serves delinquents and 'pre-delinquents.' Some would end up in the correctional system."
- Milwaukee: "Social and income maintenance costs would increase."

- Hartford: Elimination of the program "will increase unemployment and our welfare caseload."
- Jamestown: "They will end up in the adult criminal justice system or social services child protection."
- Tacoma: "Job Corps represents the last stop for many of these youths. Jobs Corps is the only thing that keeps them away from an environment that has prevented them from being successful."

Summer Youth Employment

Proposed cuts in the summer youth employment program would force 37,205 young people in 77 of the survey cities from the program this summer and 39,060 young people in 73 cities from the program next summer. In over four out of five cities (84 percent) alternative services for these young people will not be available.

In commenting on what would happen to the young people forced from the program, several cities highlight the importance of the program to a low income family's income and to the young person's education. Allentown points out that the "loss of income could jeopardize education." Seattle officials explain that the city "will have no structured program for them and they probably won't be able to get jobs for the summer. For some children this is serious because they need the money earned in the summer to help pay school costs." Cedar Falls expects that low income families will be particularly hard hit. Iowa City comments that "many of them support themselves or their families."

Others are concerned about the lack of constructive activity. In Columbus "many will end up in 'unstructured environments' -- the city would attempt to attract these youths to recreational programs." Miami and Muncie both comment that young people forced from the summer jobs program will be idle. Chicago officials are concerned that "they would be enticed to join gangs since they would have nothing else to do."

State Restrictions

Only three cities expect their state governments to provide funds to compensate for the proposed federal cuts in employment and training programs.

HEALTH

Based on survey responses, proposed cuts in federal health outlays in FY86 will negatively affect the nation's cities and the people who live in them. From Louisville to Lubbock, from Tacoma to East Orange, from Peoria to Caguas, there is deep concern over the Administration's plans to reduce funding for Medicaid, health block grants and categorical health programs. There is fear that the incidence of infant mortality, childhood diseases, tuberculosis and sexually transmitted diseases will rise -- an effective demonstration of failing health. There is fear that people in need of health care will not receive it. And there is concern that costs of health care will be shifted to local governments.

Eighty percent of all respondent cities with local health departments said they expect an increase in local health costs as a result of such cost shifting.

Medicaid

Seventy percent of cities surveyed said the Administration's plans to cap Medicaid payments to the states will produce reductions in locally available health services or in the number of people who receive care. Sixty-five percent of the cities project cuts in both -- quantity of health services and numbers of people served.

While some cities do not expect Medicaid cuts to directly impact local government, many of them believe there will be an indirect impact. Grand Forks, for instance, said a ripple effect would occur, with other local agencies feeling the pinch. One Pennsylvania city suggested the proposed Medicaid cuts would further reduce the already small number of physicians willing to accept Medicaid patients.

Incidence of Disease

The survey asked cities to indicate if they anticipated an increase in infant mortality, childhood diseases, tuberculosis or sexually transmitted diseases as a result of health funding cuts. About 69 percent foresee a rise in at least one of these categories. More than half said there would be an increase in all four health indicators, meaning a worsening in the city's health status:

- Sexually transmitted disease rates will increase in 67 percent of the cities
- Childhood disease rates will increase in 64 percent
- Infant mortality rates will increase in 62 percent
- Tuberculosis rates will increase in 60 percent

State Restorations

Fewer than four percent of the cities surveyed said they expect the state to provide funding to compensate for any portion of anticipated federal funding cut-backs. In all but two cases, the cities estimated the state restoration as too small to calculate.

CITY FISCAL CONDITIONS

The vast majority of responding cities say they raised revenues or reduced services last year to achieve a balanced budget. A total of 91 percent of the cities said they were forced to take some action. Thus, many painful budget decisions have already been made by cities -- decisions which continue to affect their revenue and expenditure patterns in the current fiscal year.

Of the total number of cities responding

- 49 percent said they raised user fees last year
- 41 percent laid off workers or instituted hiring freezes
- 28 percent enacted property tax increases
- 40 percent were forced to cut services
- 11 percent enacted other tax increases
- 20 percent instituted other changes.

These other changes include speedups of tax collections, cancelling large purchases, fund transfers and a myriad of smaller tax increases.

For this fiscal year, most cities say they are currently predicting a balanced budget. Cities are required by law to balance their budgets. Yet, city expectations of budget balances are contingent on continuing federal aid. Otherwise, additional service cuts or revenue increases will have to be made by these cities soon.

Many of the cities now face a more difficult and more uncertain future because their fiscal years differ from the fiscal year of the federal government. For example, a large number of cities have fiscal years extending from January 1 to December 30, which means their FY85 budgets could be substantially affected by FY86 federal budget cuts which would be effective on October 1.

Of the 22 percent of the survey cities forecasting a budget surplus this fiscal year two out of three have already committed the funds to ongoing services or to the pay-back of prior year deficits. On average, these surpluses comprise 4.3 percent of total city revenues.

Nine percent of the cities responding must take action to avert a deficit this year. On average, the deficits to be overcome represent 8.5 percent of the total city revenues.

STATE AID

The overwhelming majority of cities -- a total of 85 percent -- say they expect no additional funds whatsoever from their states to compensate for the federal budget cuts. Thirteen percent expect their state to provide some funds.

In general, the percentages of cities expecting additional state aid in specific program areas are quite low: Eight percent of the cities expect additional state aid for transportation, 6 percent for health, 4 percent for assisted housing, 4 percent for wastewater treatment and still lower percentages for Community Development Block Grants, Urban Development Action Grants, employment and training and loan programs.

Very few cities could estimate what percent of the federal program cuts might be made up by the states. Those who did predicted very low percentages in virtually all program areas.

There was little correlation of city expectations of additional aid within a state -- that is, while one city in a state would expect additional state aid to compensate for transit (or other) losses, other cities in that state usually would not.

The percentage of cities expecting state aid to compensate for the elimination of general revenue sharing (reported in the "General Revenue Sharing" chapter of this report) was still lower. A total of 94 percent of the cities said they did not expect any additional state help whatsoever to compensate for the loss of revenue sharing.

CITY REVENUES

Fifty-one percent of the cities responding to the Conference of Mayors survey said they would raise local revenues to compensate for some of the proposed federal budget cuts. (For general revenue sharing the percentage is much higher -- 68 percent). Another 49 percent said they would not, either because they are constrained from doing so by state law, have high tax burdens already, or because of the unlikelihood of getting approval from voters, city councils or state legislators. In addition, some of these cities said they would be forced to borrow additional funds in the bond market or take other actions to adjust. Only 3 percent said they would be able to absorb the cuts in some relatively painless way.

Because this was a tax question dealing only with whether cities intend to compensate for the federal budget cuts by raising their own revenues, it does not specifically cover any of the other mechanisms they may use to adjust to such cuts -- service cuts, layoffs, etc.

The major revenue increases cited by respondents were predominantly user fees and property tax increases. To a lesser extent, cities predicted other adjustments, sales tax increases, income tax hikes and other actions.

The table below shows the percentages of the cities that said they would raise specific types of taxes. As can be seen, of those who said they would increases taxes, 53 percent said they would increase user fees for wastewater treatment, and 45 percent would increase them public transit. These programs lend themselves fairly well to user fees, while other programs do not. Of those saying they would raise other taxes, 26 percent said they would increase property taxes to compensate for part of the loss of Community Development Block Grants, 20 percent to compensate for health, 19 percent for transit, 14 percent for wastewater treatment. Most of the cities responding cited more than one revenue increase that they would be forced to make. Consequently, the percentage totals add to more than 100 percent.

Percent of Cities Intending to Raise Taxes to Compensate for Federal Cuts

	Property Tax	Sales Tax	Income Tax	User Fees	Other
Assisted Housing	12%	3%	1%	4%	4%
Community Development Block Grant	26	4	3	4	9
Urban Development Block Grant	8	0	0	0	4
Loan Programs	7	0	0	3	4
Employment & Training	9	0	0	4	1
Health	20	1	0	18	7
Public Transit	19	7	0	45	5
Wastewater Treatment	14	1	0	53	9
Other	16	3	3	14	7

TREASURY DEPARTMENT TAX PROPOSALS

The vast majority of cities predict major adverse consequences for their localities if some of the Treasury Department's tax proposals are adopted.

Curbs on Municipal Bonds

The response to the Treasury Department's proposed curbs on "private purpose" municipal bonds is almost completely negative, with all but one city citing at least one project or effort which would be affected.

Negative effects were cited by

- 90 percent on economic development activities
- 55 percent on infrastructure
- 49 percent on low income housing
- 25 percent on resource recovery
- 25 percent on airports

- 18 percent on nonprofit and private hospitals
- 13 percent on other projects.

The "other" category included renovation of historic buildings and areas, neighborhood and business revitalization, single-family mortgage revenue bonds, social service programs, park development and an increase in interest costs for nearly all city projects.

Elimination of Deductibility

An overwhelming 87 percent predicted that elimination of deductibility of state and local taxes would make it very difficult to raise local taxes, would lead to declining real estate values, or have other negative effects. These "other effects" include increased pressure to reduce taxes, a slowdown in economic development, increased condo conversions and a shift from taxes to user fees. Only nine percent of the sample said there would be no effect and another two percent said they did not yet know the precise effects.

Elimination of Tax Credits

A sizeable majority of the cities also predict that elimination of rehabilitation and historic tax credits -- as proposed by the Treasury Department -- would be adverse or very adverse for their cities. A total of 80 percent say the results would be adverse of very adverse; 20 percent say there would be virtually no effect.

Most of the cities had some knowledge of public-private projects using the rehabilitation tax credits -- those where there is some investment or participation by the city. Few, were however, aware of the private-only projects which might be using the credits.

Elimination of Charitable Deductions

A total of 85 percent of the cities said that the availability of private and nonprofit social services would suffer as a result of the Treasury plan to curb charitable contributions.

APPENDICES

APPENDIX A

PLEASE MAIL THIS QUESTIONNAIRE NO LATER THAN CLOSE OF BUSINESS, MONDAY, FEBRUARY 25, 1985 TO THE U.S. CONFERENCE OF MAYORS

Do you wish the information in this questionnaire held confidential?
___Yes ___No CITY_____________________

THE IMPACT OF THE PROPOSED FY86 BUDGET ON CITIES

1. General Revenue Sharing

a) The Administration's budget proposes to eliminate General Revenue Sharing in FY86. What percentage of your city's total revenues including all intergovernmental grants is accounted for by the revenue sharing program?__________%

b) If revenue sharing is eliminated, what is your city's likely course of action? Check the appropriate items below.

Cuts in Services
___Public safety (police and fire)
___Human services
___Sanitation
___Capital improvements
___Health services
___Other (explain)______________________________
___None

Tax Increases
___Property taxes
___Income taxes
___User fees
___Sales taxes
___Other tax hikes (explain)______________________

Other Actions (explain)__________________________
____
____

c) Do you expect your state government will make up for any of the cut in revenue sharing funds? ___Yes ___No
If yes, what percentage?________________%

2. **Community Development Block Grant**

a) The Administration's FY86 budget proposes a 10 percent cut in CDBG and a change in the entitlement cities/small cities ratio from 70/30 to 60/40. This translates into a proposed 23 percent cut for entitlement cities and a possible 10 percent cut for small cities. What will be the effect of this cut on community development in your city?
___None ___Adverse ___Very Adverse

Explain____
____
____

b) Show the percentage of your CDBG that goes into each of the following areas.
Economic Development______________%
Housing Assistance________________%
Social Services___________________%
Public Works/Infrastructure_________%
Other_____________________________%

c) Which of the areas listed above would most likely be cut in your city as a result of the federal cut?____________
____

3. **Urban Development Action Grants**

a) The federal budget proposes to eliminate UDAGs beginning in FY86. What would be the effect of the elimination of the program in your city?
___None ___Adverse ___Very Adverse

Explain____
____
____

b) How many projects eligible for UDAG funding is your city now applying for or planning to apply for? ______

c) How many dollars in the following categories do these projects involve?
UDAG $______________________
Other public $_______________
Private $____________________

d) How many jobs would these projects create in your city?
____

e) How many of these projects do you expect to go ahead without UDAG funding?_________________________________

4. **Public Transit**

The proposed FY86 budget calls for a two-thirds reduction in transit assistance, which would include a total elimination of federal operating assistance and a rise in the local matching share from 20 to 30 percent. The combined effect of this proposal would mean a loss of most of the federal capital assistance as well as all of the transit operating assistance to your urban area. If this budget were approved:

a) Would the fares charged by your transit system increase?
___Yes ___No If yes, by what percent?__________%

b) Would there be a reduction in the number of transit vehicles in service? ___Yes ___No

c) Would there be a reduction in routes? ___Yes ___No

d) Overall, what percentage of transit service would be reduced? ________% reduction of service

e) Would the transit system in your city be threatened with a shutdown? ___Yes ___No

5. **Wastewater Treatment Construction Grants**

The proposed FY86 budget calls for a four year phaseout of wastewater treatment construction grants, with a likely schedule to be a 25 percent reduction in each of the next four years. During those four years, federal funding would only be available for completing existing projects. Beginning in FY86 no funding would be available for new projects. If this budget were enacted:

a) Would your city be able to complete existing wastewater treatment facilities in four years, given a 25 percent reduction in each of the next four years? ___Yes ___No

b) Is your city operating under a consent decree, administrative order or other binding contractual agreement to comply with FY88 clean water standards?
___Yes ___No

c) In the absence of federal funding, will your city be able to meet these obligations without a significant increase in taxes or user fees? ___Yes ___No
Estimate the percent of tax or user fee increase required
______________%

d) Would the inability to complete an existing project or construct a new project have a negative impact on (check if relevant)
___Housing
___Community development
___Economic development
___Jobs
___Environmental quality

6. **Assisted Housing**

a) The FY86 budget proposes a moratorium on all new units of assisted housing. What will be the effect of this moratorium on the availability of housing affordable by low income people in your city?
___None ___Adverse ___Very Adverse

Explain ____
____
____

b) Funds for the modernization of public housing, other than for emergencies, would be eliminated for one year. What would be the effect of this action on public housing in your city?
___None ___Adverse ___Very Adverse

c) What is the current waiting list for the following types of assisted housing in your city?
Section 8____________months
Section 202____________months
Public Housing__________months
What will be the effect of the proposed moratorium on these waiting lists? ___None ___They will be lengthened.

d) How many units did your city receive in each of the following categories of assisted housing in FY84?
Section 8____________________
Section 202__________________
Public Housing_______________
Rental Rehabilitation__________

e) How many projects eligible for Housing Development Action Grants is your city now applying for or planning to apply for?____
How many total units are involved?___________________
What percentage of these units are for low income people?
________________________________%

7. **Loan Programs (Section 312, Section 108, EDA, SBA)**

a) The FY86 budget proposes to eliminate Section 312 rehabilitation loans, Section 108 community development loan guarantees, the Small Business Administration's loan programs and the loan and grant programs of the Economic Development Administration. What would be the effect on your city of the elimination of these programs?
___None ___Adverse ___Very Adverse

Explain ____
____
____

b) Did your city use the Section 312 loan program last year?
___Yes ___No
If yes, how much money and how many units were involved?
$____________ ________________units

c) Did your city use Section 108 loan guarantees during FY84?
___Yes ___No
If yes, how much money was guaranteed by this program in your city last year? $_____________

d) Did your city receive funds from the Economic Development Administration during FY84? ___Yes ___No
If yes, how much? $___________________________

8. **Employment and Training**

a) The FY86 budget proposes to eliminate the Jobs Corps, to cut the summer youth employment program by $100 million (12 percent) in FY85 and by another $60 million (19.4 percent in total) in FY86, and to cut the dislocated worker program by $120 million in FY85 (51 percent) and by another $15 million (57 percent in total) in FY86. What will be the effect of these cuts on your city?
___None ___Adverse ___Very Adverse

Explain ____
____
____

b) How many young people in your city are served by the Jobs Corps?________________
Are alternative services available to them in your city?
___Yes ___No
What will happen to these young people if the program is eliminated?____
____
____

c) How many young people in your city will be forced from the summer youth employment program if it is cut this summer?
____________next summer?________________
Are other jobs programs available for them? ___Yes ___No
What will happen to these young people?_________________
____
____

9. **Health**

a) The FY86 budget proposes to cut $1.1 billion from the Medicaid program, capping federal matching payments to the states. Do you anticipate a reduction in services or a reduction in the number of people served as a result? (Check if appropriate)
Services cut ___Yes ___No
People cut ___Yes ___No

b) The FY86 budget proposes to freeze health block grants (maternal and child health, prevention, primary care, and alcohol, drug abuse and mental health) at FY85 levels and to cut various public health programs such as immunization, tuberculosis control, and sexually transmitted disease control. Do you expect the incidence of infant mortality, childhood diseases, tuberculosis, or sexually transmitted diseases to rise as a result?
Infant mortality ___Yes ___No
Child diseases ___Yes ___No
Tuberculosis ___Yes ___No
Sexually transmitted diseases ___Yes ___No

c) Does your city operate a local health department?
___Yes ___No
If yes, will it experience an increase in local costs as a result of a shifting of costs and responsibilities for services from other local providers? ___Yes ___No

10. Will your city government be able to raise local revenues to compensate for any of the federal cuts described in questions one through nine? ___Yes ___No

If yes, check below for which program areas and by which kind of tax your city would raise local revenues

	Property Tax	Sales Tax	Income Tax	User Fees	Other
Assisted Housing					
CDBG					
UDAG					
Loan Programs					
Employ. & Train.					
Health					
Public Transit					
Wastewater Treat.					
Other Programs					

11. Do you expect your state government to provide funds to your city to compensate for the cuts? ___Yes ___No

If yes, please check those program areas for which you expect your state to provide funds and indicate the percentage of the cut you expect the state to restore.

___Assisted Housing________________%
___CDBG____________________________%
___UDAG____________________________%
___Loan Programs___________________%
___Employment and Training_________%
___Health__________________________%
___Transportation__________________%
___Wastewater Treatment____________%

12. **Surplus/Deficit**

a) For the current fiscal year are you now facing an
___operating budget deficit,
___operating budget surplus, or
___balanced budget?

b) If you are facing a surplus or a deficit, what percent of total revenues does this represent?______%

c) If you expect a surplus this year, is this surplus already committed to ongoing services? ___Yes ___No

d) What is your city's fiscal year?________________________

e) Check which budget adjustment, if any, your city made in the last fiscal year to achieve a balanced budget.
___Property tax increases
___User fee increases
___Income tax increases
___Other tax hikes
___Service cutbacks
___Hiring freezes or layoffs
___Other (explain)____

13. **Tax Proposals**

The Treasury Department has proposed a tax plan which proposes to end the tax exemption of all private purpose bonds, to curtail the charitable contribution deduction, to eliminate all rehabilitation and historic preservation tax credits and to eliminate the deductability of all state and local taxes, including property taxes.

a) Check the types of projects that would be jeopardized in your city if the exemption for private purpose bonds is terminated.

___Infrastructure projects
___Resource recovery
___Airports
___Ports
___Low income housing
___Hospitals
___Economic development activities
___Other (explain)______________________________

b) What would be the effect in your city of terminating all rehabilitation and historic tax credits?

___None ___Adverse ___Very Adverse

How many projects are currently pending in your city for which you plan to make use of these tax credits? ________

c) Will social services in your city be adversely affected by Treasury's plan to curtail the charitable contribution deduction?

___Yes ___No

d) What do you expect will be the result in your city if the current deduction for state and local taxes were eliminated?

___More difficulty raising local taxes
___Adverse effect on real estate values
___Other effect (explain)______________________________
___NO effect

PERSON COMPLETING QUESTIONNAIRE
Name______________________________
Title______________________________
Agency______________________________
Address______________________________
____
Telephone ( )______________________________
____

PLEASE MAIL THIS QUESTIONNAIRE NO LATER THAN CLOSE OF BUSINESS MONDAY, FEBRUARY 25, 1985 TO:

U.S. CONFERENCE OF MAYORS
1620 EYE STREET, N.W.
WASHINGTON, D.C. 20006

THANK YOU!

APPENDIX B: SURVEY RESPONSES FROM FIFTY SELECTED CITIES

CITY NAME	GENERAL REVENUE SHARING Service Cuts A-Public Safety B-Human Services C-Sanitation D-Capital Improvement E-Health Services	GENERAL REVENUE SHARING Tax Increases A-Property Taxes B-Income C-User Fees D-Sales	CDBG Areas Cut A-Economic Develop B-Housing Services C-Social Serivices D-Public Works/ Infrastructure	UDAG Effect of Program Elimination	TRANSIT Effect of Cuts. Will Fares Increase?
Annapolis, MD	A,D	A,C	B,D	none	yes
Ashland, KY	D	C	A,B,C,D	adverse	yes
Asheville, NC	D	A,C	B	very adverse	yes
Aurora, CO	--	--	A,B,C,D	none	--
Birmingham, AL	B,D	--	B	very adverse	yes
Caguas, PR	--	--	C,D	very adverse	--
Cambridge, MA	--	A	B	adverse	yes
Cedar Rapids, IA	--	A	B	none	yes
Charleston, SC	A,C,D	A,C	A,B	very adverse	yes
Cheyenne, WY	D	--	A	none	no
Chicago, IL	B,C,E	--	A,B,C,D	adverse	yes
Clearwater, FL	--	A,C	A,B	--	--
Columbus, OH	--	C	A,B,C,D	none	yes
East Orange, NJ	A,B,D	A	A,B	adverse	yes
Erie, PA	A	A	A,B,C,D	very adverse	yes
Evansville, IL	A,B,E	A,B	A,B,C,D	very adverse	yes
Flint, MI	A	A	B	very adverse	yes
Fresno, CA	D	--	--	adverse	yes
Greenville, SC	D	A,C	--	adverse	yes
Hartford, CT	--	A	--	very adverse	yes
Hermitage, PA	D	A	B	none	--
Iowa City, IA	B,D	A,C	B	none	yes
Jamestown, NY	A,B	A,C	A,B,C,D	very adverse	yes
Juneau, AK	--	A,C	--	--	no
Lafayette, IN	A,D,E	A,C	A,D	adverse	yes

	GENERAL REVENUE SHARING		CDBG	UDAG	TRANSIT
CITY NAME	Service Cuts	Tax Increases	Areas Cut	Effect of Program Elimination	Effect of Cuts Will Fares Increase?
	A-Public Safety B-Human Services C-Sanitation D-Capital Improvement E-Health Services	A-Property Taxes B-Income C-User Fees D-Sales	A-Economic Develop B-Housing Services C-Social Serivices D-Public Works/ Infrastructure		
Louisville, KY	C,D	--	B,D	adverse	yes
Lubbock, TX	D	A,C	B,C	very adverse	yes
Madison, WI	D	A,C	A,B	adverse	yes
Mankato, MN	A,D	A,C	--	none	yes
Miami, FL	A,B,C	--	C	very adverse	--
Milwaukee, WI	A,C,E	A	A,B,C,D	very adverse	yes
Mobile, AL	D,E	--	B	none	yes
New Orleans, LA	--	--	A,B,C,D	adverse	no
Norfolk, VA	B,C,D,E	A,C	B	adverse	no
Oak Park, MI	A,B	--	A,B,C,D	very adverse	yes
Orem, UT	A,D	A	B,C	none	yes
Pawtucket, RI	A,C,D	A	A,B,C,D	adverse	yes
Peoria, IL	A,D	--	B,C	very adverse	yes
Rochester, MI	D	A	A,C	none	yes
St. Louis, MO	--	--	B	very adverse	yes
San Francisco, CA	B,D	--	A,B,C,D	very adverse	no
Seattle, WA	--	--	--	adverse	yes
South Bend, IN	--	A	A,B,C,D	adverse	yes
Spokane, WA	A,B,D	C	B,C	none	yes
Syracuse, NY	--	A	A,B,C	very adverse	--
Tacoma, WA	A,B,C	--	C	adverse	yes
Tempe, AZ	--	--	B	none	yes
Toledo, OH	B,C,D,E	--	B,C	very adverse	--
Trenton, NJ	A	A	B,C	very adverse	yes
Tuscon, AZ	--	--	A,B,C	adverse	yes

CITY NAME	WASTEWATER TREATMENT	HOUSING	LOANS	EMPLOYMENT & TRAINING	HEALTH
	Able to complete existing projects in 4 years?	Moratorium. Will waiting list for new units be lengthened?	Effect of elimination of loan programs (SBA, Sec. 132, 108, EDA)	Effect of elimination/cuts (Summer Youth Employment and Dislocated Worker)	Will services be cut due to Medicaid cut?
Annapolis, MD	no	yes	adverse	adverse	--
Ashland, KY	no	yes	very adverse	none	--
Asheville, NC	no	yes	very adverse	--	--
Aurora, CO	--	yes	adverse	adverse	yes
Birmingham, AL	--	yes	adverse	very adverse	no
Caguas, PR	no	yes	very adverse	--	--
Cambridge, MA	--	yes	very adverse	very adverse	yes
Cedar Rapids, IA	--	yes	none	very adverse	--
Charleston, SC	yes	yes	very adverse	very adverse	--
Cheyenne, WY	yes	--	none	none	--
Chicago, IL	--	--	adverse	--	--
Clearwater, FL	yes	--	adverse	none	--
Columbus, OH	yes	no	none	--	no
East Orange, NJ	yes	yes	very adverse	adverse	yes
Erie, PA	--	yes	adverse	very adverse	yes
Evansville, IL	yes	yes	very adverse	very adverse	yes
Flint, MI	yes	yes	very adverse	very adverse	yes
Fresno, CA	yes	--	--	adverse	--
Greenville, SC	--	--	adverse	--	--
Hartford, CT	--	yes	very adverse	very adverse	yes
Hermitage, PA	yes	--	adverse	--	--
Iowa City, IA	no	yes	none	adverse	--
Jamestown, NY	no	yes	very adverse	adverse	yes
Juneau, AK	yes	--	none	--	no
Lafayette, IN	no	yes	none	very adverse	yes

CITY NAME	WASTEWATER TREATMENT Able to complete existing projects in 4 years?	HOUSING Moratorium. Will waiting list for new units be lengthened?	LOANS Effect of elimination of loan programs (SBA, Sec. 132, 108, EDA)	EMPLOYMENT & TRAINING Effect of elimination/cuts (Summer Youth Employment and Dislocated Worker)	HEALTH Will services be cut due to Medicaid cut?
Louisville, KY	no	yes	very adverse	adverse	yes
Lubbock, TX	yes	yes	very adverse	adverse	yes
Madison, WI	yes	yes	adverse	adverse	yes
Mankato, MN	yes	yes	adverse	none	—
Miami, FL	—	yes	very adverse	very adverse	yes
Milwaukee, WI	yes	—	very adverse	adverse	yes
Mobile, AL	yes	yes	adverse	adverse	—
New Orleans, LA	no	yes	very adverse	adverse	yes
Norfolk, VA	yes	yes	very adverse	adverse	yes
Oak Park, MI	no	yes	very adverse	very adverse	yes
Orem, UT	yes	—	—	adverse	yes
Pawtucket, RI	no	yes	very adverse	adverse	yes
Peoria, IL	no	—	very adverse	very adverse	yes
Rochester, MI	yes	—	adverse	none	—
St. Louis, MO	no	—	very adverse	very adverse	—
San Francisco, CA	no	yes	adverse	adverse	no
Seattle, WA	yes	—	very adverse	very adverse	yes
South Bend, IN	yes	yes	adverse	very adverse	yes
Spokane, WA	yes	yes	adverse	adverse	yes
Syracuse, NY	—	yes	very adverse	very adverse	—
Tacoma, WA	yes	yes	very adverse	adverse	yes
Tempe, AZ	—	yes	—	—	—
Toledo, OH	—	—	very adverse	—	—
Trenton, NJ	no	yes	very adverse	very adverse	yes
Tuscon, AZ	yes	yes	adverse	very adverse	—

CITY NAME	LOCAL REVENUE Can local revenue be raised to compensate for federal cuts?	STATE ASSISTANCE Will state provide funds to compensate for federal cuts?	PAST YEAR BUDGET ADJUSTMENTS A-Property Tax Increase B-User Fee Increase C-Income Tax Increase D-Other Tax Increase E-Service Cutbacks F-Hiring Freeze/Layoff	ELIMINATION OF FEDERAL TAX EXEMPTION FOR PRIVATE PURPOSE BONDS A-Infrastructure proj. B-Resource recovery C-Airports D-Ports E-Low Income Housing F-Hospitals G-Economic Development	ELIMINATION OF STATE/LOCAL TAX DEDUCTIBILITY A-More difficulty raising local taxes B-Adverse effect on real estate C-No effect
Annapolis, MD	yes	no	A,B	A,B,G	A,B
Ashland, KY	yes	no	E,F	A,F,G	A
Asheville, NC	no	no	B,D	A,C,E,G	A,B
Aurora, CO	no	no	--	--	--
Birmingham, AL	no	no	--	F,G	C
Caguas, PR	no	yes	E,F	--	--
Cambridge, MA	no	no	A	G	A,B
Cedar Rapids, IA	yes	--	--	A,C	A
Charleston, SC	no	no	A,B	A,C,D,E,F,G	A,B
Cheyenne, WY	no	no	F	--	C
Chicago, IL	no	no	B,D,F	A,C,E,G	A
Clearwater, FL	yes	no	A,B	G	C
Columbus, OH	yes	yes	--	G	C
East Orange, NJ	yes	no	A	A	B
Erie, PA	no	no	A,F	--	A,B
Evansville, IL	no	no	A	G	A
Flint, MI	yes	yes	C	A,C,E,G	C
Fresno, CA	no	no	--	A,C,E,F,G	B
Greenville, SC	yes	no	--	A	A
Hartford, CT	no	no	--	G	A,B
Hermitage, PA	--	no	C	--	A,B
Iowa City, IA	yes	no	A,B	--	--
Jamestown, NY	no	no	A,B	G	A,B
Juneau, AK	yes	yes	A,B	A,E	C
Lafayette, IN	yes	no	A,B,C	A,G	A,B

CITY NAME	LOCAL REVENUE Can local revenue be raised to compensate for federal cuts?	STATE ASSISTANCE Will state provide funds to compensate for federal cuts?	PAST YEAR BUDGET ADJUSTMENTS A-Property Tax Increase B-User Fee Increase C-Income Tax Increase D-Other Tax Increase E-Service Cutbacks F-Hiring Freeze/Layoff	ELIMINATION OF FEDERAL TAX EXEMPTION FOR PRIVATE PURPOSE BONDS A-Infrastructure proj. B-Resource recovery C-Airports D-Ports E-Low Income Housing F-Hospitals G-Economic Development	ELIMINATION OF STATE/LOCAL TAX DEDUCTIBILITY A-More difficulty raising local taxes B-Adverse effect on real estate C-No effect
Louisville, KY	no	no	—	E	--
Lubbock, TX	no	no	—	C,G	B
Madison, WI	yes	no	A,B,E,F	A,B,E,G	A
Mankato, MN	yes	yes	A,B	G	A
Miami, FL	no	no	A,B,F	A,G	A
Milwaukee, WI	no	no	A,B	E,G	A,B
Mobile, AL	no	no	D	G	A,B
New Orleans, LA	yes	no	B,D,E,F	A,B,C,D,E,F,G	A,B
Norfolk, VA	no	no	B	C,F,G	A,B
Oak Park, MI	no	no	F	A,G	A,B
Orem, UT	--	no	A,B	A,B,E,F,G	A,B
Pawtucket, RI	no	yes	A	E,G	A
Peoria, IL	no	no	—	A,G	A
Rochester, MI	yes	no	A	F,G	A,B
St. Louis, MO	no	no	F	A,B,C,E,G	A
San Francisco, CA	no	no	—	E,G	C
Seattle, WA	no	no	B	A,B,E,F,G	A
South Bend, IN	yes	no	A,E,F	A,B,C,G	A,B
Spokane, WA	yes	no	B,E	B,G	A
Syracuse, NY	no	no	A,F	E,C	A
Tacoma, WA	yes	no	E,F	G	A,B
Tempe, AZ	no	no	A,B	E,G	A
Toledo, OH	no	no	B,C	A,B,C,D,E,G	A,B
Trenton, NJ	yes	yes	A,E,F	E	C
Tuscon, AZ	--	no	A,B	E,G	B

APPENDIX C: CITIES RESPONDING TO THE SURVEY

CITY	POPULATION	CITY	POPULATION
Akron, OH	231,659	Jacksonville, FL	556,370
Alameda, CA	63,852	Jamestown, NY	35,775
Allentown, PA	104,324	Jersey City, NJ	222,881
Annapolis, MD.	31,740	Joliet, IL	77,956
Anchorage, AK	194,675	Juneau, AK	27,500
Ann Arbor, MI	104,880	Kansas City, KS	162,211
Arlington, TX	182,975	Kansas City, MO	445,222
Asheville, NC	53,281	Kettering, OH	61,186
Ashland, KY	27,064	Kokomo, IN	47,808
Aurora, CO	184,372	Lafayette, IN	43,011
Baton Rouge, LA	361,572	La Mirada, CA	40,986
Beaumont, TX	123,477	Largo, FL	58,977
Benton Harbor, MI	14,707	Lauderhill, FL	37,271
Birmingham, AL	283,239	Los Angeles, CA	3,022,247
Boston, MA	560,847	Louisville, KY	293,531
Bountiful, UT	32,877	Lubbock, TX	176,588
Brooklyn Center, MN	31,230	Madison, WI	172,640
Buena Park, CA	64,165	Mankato, MN	28,651
Caguas, PR	119,800	Mason City, IA	30,144
Cambridge, MA	95,322	Memphis, TN	645,760
Carbondale, IL	27,194	Miami, FL	382,726
Cedar Rapids, IA	109,086	Milwaukee, WI	631,509
Charleston, SC	69,510	Minneapolis, MN	369,161
Cheyenne, WY	47,283	Mobile, AL	204,586
Chicago, IL	2,997,155	Monroe, LA	57,597
Cincinnati, OH	380,118	Montebello, CA	52,929
Clearwater, FL	85,450	Muncie, In	77,216
Cleveland, OH	558,869	Nashua, NH	67,865
Colorado Springs, CO	231,699	Natchez, MS	22,209
Columbus, OH	570,588	New Bedford, MA	98,478
Concord, CA	104,061	New Orleans, LA	564,561
Corpus Christi, TX	246,081	New York, NY	7,086,096
Covington, KY	49,013	Norfolk, VA	266,874
Cranston, RI	71,992	Oak Park, IL	54,887
Culver City, CA	38,139	Oak Park, MI	31,537
Dallas, TX	943,848	Ogden City, UT	64,407
Davenport, IA	103,799	Oklahoma City, OK	427,714
De Kalb, IL	33,099	Omaha, NE	328,557
Denton, TX	48,063	Orem, UT	52,399
Denver, CO	505,563	Paducah, KY	29,315
Detroit, MI	1,138,717	Parsippany-Troy Hills, NJ	49,868
East Chicago, IN	39,786	Pawtucket, RI	71,204
East Orange, NJ	77,878	Peoria, IL	122,261
Elmhurst, IL	44,251	Philadelphia, PA	1,665,382
Erie, PA	118,493	Phoenix, AZ	824,230
Evansville, IN	130,275	Pittsburgh, PA	414,936
Fall River, MA	92,574	Port Arthur, TX	61,195
Flint, MI	154,019	Provo, UT	73,907
Fort Wayne, IN	167,633	Reno, NV	106,748
Fresno, CA	244,623	Richmond, CA	74,676
Gastonia, NC	47,333	Richmond, VA	218,237
Grand Forks, ND	43,765	Riverside, CA	174,023
Grand Rapids, MI	182,774	Rochester, MN	57,855
Greeley, CO	53,006	Rockford, IL	138,334
Greenville, SC	58,242	Sacramento, CA	288,597
Hamilton Township, NJ	82,801	St. Louis, MO	437,354
Harrisburg, PA	53,264	St. Petersburg, FL	241,214
Hartford, CT	136,334	Salt Lake City, UT	163,859
Hawthorne, CA	56,447	San Antonio, TX	819,021
Hayward, CA	94,167	San Francisco, CA	691,637
Hermitage, PA	17,540	San Jose, CA	659,181
Highland Park, IL	30,611	San Juan, PR	522,700
Honolulu, HI	781,899	Savannah, GA	145,699
Houston, TX	1,725,617	Seattle, WA	490,077
Indianapolis, IN	707,655	Shreveport, LA	210,881
Inkster, MI	35,190	South Bend, IN	107,690
Iowa City, IA	50,508	Spokane, WA	171,903
Jackson, MS	204,195	Stockton, CA	161,815

CITY	POPULATION
Sunrise, FL	39,681
Syracuse, NY	166,187
Tacoma, WA	161,351
Tampa, FL	276,413
Tempe, AZ	112,514
Terre Haute, IN	61,125
Toledo, OH	350,565
Topeka, KS	120,269
Torrance, CA	130,213
Trenton, NJ	92,124
Tucson, AZ	352,455
Tulsa, OK	375,300
Waltham, MA	58,200
Washington, D.C.	633,425
Waukegan, IL	67,653
West New York, NJ	39,194
Wilkes-Barre, PA	51,551
Wilmington, DE	70,195
Winston-Salem, NC	140,846
Worcester, MA	161,049
York, PA	44,619

Senator WEICKER. Our next witness is Mr. Samuel Simmons, president of the National Caucus and Center on Black Aged, Inc. Is Mr. Simmons here?

[No response.]

Senator WEICKER. Mr. A. David Lester, executive director of the Council of Energy Resource Tribes. Is Mr. Lester here?

[No response.]

Senator WEICKER. I will let the subcommittee stand in recess for the next 15 minutes.

[A brief recess was taken.]

STATEMENT OF SAMUEL J. SIMMONS, PRESIDENT, THE NATIONAL CAUCUS AND CENTER ON BLACK AGED, INC.

Senator WEICKER. The subcommittee will come to order.

We have one witness, Mr. Samuel J. Simmons. Is Mr. Simmons here?

Mr. SIMMONS. Yes.

Senator WEICKER. Mr. Simmons, why don't you come forth and start your testimony. I might add, I have a question for you, submitted by Senator Specter, for response to the record. Please proceed.

[CLERK'S NOTE.—No response received to date.]

Mr. SIMMONS. Mr. Chairman and members of the Labor, Health and Human Services, and Education Appropriations Subcommittee, the National Caucus and Center on Black Aged appreciates the opportunity to testify on funding for programs affecting aged blacks and other older Americans.

We recognize that our time is limited, consequently, we shall summarize our testimony.

At the outset, NCBA fully realizes that we are living in austere times. We fully appreciate the need to economize. But, these efforts should simply not be directed at domestic programs that serve the needs of disadvantaged and other persons in our society. Many of these programs have already been slashed in recent years.

It is time we started looking at the real culprits affecting the budget deficit: one, dramatic funding hikes for the Pentagon; two, an excessive tax reduction in 1981 that would have siphoned an estimated $750 billion over a 6-year period; and three, mounting interest on the national debt. These three items cannot simply be put off the table in grappling with our budget deficit.

This subcommittee has been the champion of people programs over the years, and we urge you to continue to fulfill this role.

At this time, we would like to turn briefly to our recommendations for the fiscal year 1986 appropriations bill.

First, NCBA urges that the title V Senior Community Service Employment Program be funded, at a minimum, at $326 million for fiscal year 1986. This is the same amount as the fiscal year 1985 appropriation and the administration's budget request for fiscal year 1986.

Title V has served our Nation well over the years. It has enabled some of the most disadvantaged persons in our society to help themselves while helping others at the same time. Many of these individuals have subsequently been placed in the private sector in gainful employment.

The Senior Community Service Employment Program is clearly a win-win situation. It not only helps low-income older Americans but it also benefits the communities they serve in many ways. Today, numerous localities have additional services solely because of title V. These services take many forms—home repair, paralegal, nutrition aides, health aides, et cetera.

Equally important, the Senior Community Service Employment Program helps our Nation by enabling low-income persons to obtain gainful employment and contribute to our society.

A $326 million appropriation would support about 63,800 positions. However, at least 100,000 will be able to participate in the program at some point during the year because enrollees are able to use their title V skills to secure employment in the private sector. Moreover, the Senior Community Service Employment Program makes effective use of temporaries to provide crucial services needed on a short-term basis.

Title V is still desperately needed now despite improvements in the employment situation. Recent modest reductions in unemployment for persons 55 or older have been more than offset by the elderly's exit from the labor force. The bottom line is that fewer individuals 55 or older are in the civilian labor force, although the aged population continues to grow. Yet, we know that many low-income older Americans are ready, willing, and able to work if given the chance. Title V can provide a passport for this opportunity.

For these reasons, we hope that the program will be funded at least at $326 million.

Second, NCBA supports a $25 million appropriation for title IV research, training, and demonstrations under the Older Americans Act. This is the same amount as approved by Congress for fiscal year 1985. The administration, however, has requested $12.5 million this year, and it is inadequate.

It would necessitate sharp reductions in demonstration programs to test out innovative ideas to prepare us for the future, career preparation training to develop the cadre of personnel to deliver services to older Americans, intern programs to prepare minorities for careers in the field of aging, and numerous other worthwhile activities.

Title IV has already experienced hefty cuts, 59 percent within a 2-year period, from $54.3 million in fiscal year 1980 to $22.2 million in fiscal year 1982. Last year's $2.8 million increase helped to restore partially the sharp funding reductions in recent years, but it is still only a modest beginning.

Our request is for a hold-the-line budget, which will enable title IV to carry out its vital present activities, such as supporting aging programs at historical black colleges, developing improved techniques for serving older minorities more effectively and equitably, and training persons to serve in the field of aging.

The comparatively small amount expended for title IV over the years has produced major dividends for our Nation. Some of the most successful programs in the field of aging have evolved from Older Americans Act demonstrations, including the elderly nutrition program at community sites and for the homebound, Foster Grandparents, the Retired Senior Volunteer Program, and others.

Title IV research has also produced much valuable information for policymakers, practitioners in the field of aging, and the general public.

Once again, we wish to commend the subcommittee for your past actions on behalf of older Americans, including elderly blacks. You have performed your task in a humane manner, while being fiscally responsible and fair.

NCBA believes that our two recommendations are reasonable and realistic, given the present budgetary situation. We are clearly setting our goals much lower, although the need is certainly much greater. We, therefore, ask for your support in adopting these measures.

We thank you for this opportunity to be here today.

PREPARED STATEMENT

Senator WEICKER. Mr. Simmons, I thank you very much for your testimony, and I can assure you that we will do everything that we can. Your submitted testimony will be inserted in the record.

[The statement follows:]

STATEMENT OF SAMUEL J. SIMMONS

Mr. Chairman and Members of the Labor, Health and Human Services, and Education Appropriations Subcommittee, the National Caucus and Center on Black Aged appreciates the opportunity to testify on funding for programs affecting aged Blacks and other older Americans.

We recognize that our time is limited. Consequently, we shall summarize our testimony.

At the outset, NCBA fully realizes that we are living in austere times. We fully appreciate the need to economize. But, these efforts should simply not be directed at domestic programs that serve the needs of disadvantaged and other persons in our society. Many of these programs have already been slashed in recent years.

It is time we started looking at the real culprits affecting the budget deficit: (1) dramatic funding hikes for the Pentagon, (2) an excessive tax reduction in 1981 that would have siphoned off an estimated $750 billion over a six-year period; and (3) mounting interest on the national debt. These three items cannot simply be put off the table in grappling with our budget deficit.

This Subcommittee has been the champion of people programs over the years, and we urge you to continue to fulfill that role.

At this time, we would like to turn briefly to our recommendations for the FY 1986 appropriations bill.

Title V Senior Community Service Employment Program

First, NCBA urges that the Title V Senior Community Service Employment Program be funded, at a minimum, at $326 million for fiscal year (FY) 1986. This is the same amount as the FY 1985 appropriation and the Administration's budget request for FY 1986.

Title V has served our Nation well over the years. It has enabled some of the most disadvantaged persons in our society to help themselves while helping others at the same time. Many of these individuals have subsequently been placed in the private sector in gainful employment.

The Senior Community Service Employment Program is clearly a "win-win" situation. It not only helps low-income older Americans but it also benefits the communities they serve in many ways. Today, numerous localities have additional services solely because of Title V. These services take many forms--home repair, paralegal, nutrition aides, health aides, et cetera.

Equally important, the Senior Community Service Employment Program helps our nation by enabling low-income persons to obtain gainful employment and contribute to our society.

A $326-million appropriation would support about 63,800 positions. However, at least 100,000 will be able to participate in the program at some point during the year because many enrollees are able to use their Title V skills to secure employment in the private sector. Moreover, the Senior Community Service Employment Program makes effective use of temporaries to provide crucial services needed on a short-term basis.

Title V is still desperately needed now despite improvements in the employment picture. Recent modest reductions in unemployment for persons 55 or older have been more than offset by the elderly's exit from the labor force. The bottom line is that fewer individuals 55 or older are in the civilian labor force, although the aged population continues to grow. Yet, we know that many low-income older Americans are ready, willing, and able to work if given the chance. Title V can provide a passport for this opportunity.

For these reasons, we hope that the program will be funded at least at $326 million.

Title IV Research, Training and Demonstrations

Second, NCBA supports a $25-million appropriation for Title IV research, training, and demonstrations under the Older Americans Act. This is the same amount as approved by the Congress for FY 1985. The Administration has requested only $12.5 million, and it is simply inadequate. It would necessitate sharp reductions in demonstration programs to test our innovative ideas to prepare us for the future, career preparation training to develop the cadre of personnel to deliver services for older Americans, intern programs to prepare minorities for careers in the field of aging, and numerous other worthwhile activities.

Title IV has already experienced hefty cuts--59 percent within a two-year period, from $54.3 million in FY 1980 to $22.2 million in FY 1982. Last year's $2.8 million increase helped to restore partially the sharp funding reductions in recent years. But, it is still only a modest beginning.

Our request for a "hold-the-line" budget will enable Title IV to carry out its vital present activities, such as supporting aging programs at historical Black colleges, developing improved techniques for serving older minorities more effectively and equitably, and training persons to serve in the field of aging.

The comparatively small amount expended for Title IV over the years has produced major dividends for our nation. Some of the most successful programs in the field of aging have evolved from Older Americans Act demonstrations, including the elderly nutrition program at community sites and for the homebound, Foster Grandparents, the Retired Senior Volunteer program and others.

Title IV research has also produced much valuable information for policymakers, practitioners in the field of aging, and the general public.

Conclusion

Once again, we wish to commend the Subcommittee for your past actions on behalf of older Americans, including elderly Blacks. You have performed your task in a humane manner, while being fiscally responsible and fair.

NCBA believes that our two recommendations are reasonable and realistic, given the present budgetary situation. We are clearly setting our goals much lower, although the need is certainly much greater. We, therefore, ask for your support in adopting these measures.

STATEMENT OF A. DAVID LESTER, EXECUTIVE DIRECTOR, COUNCIL OF ENERGY RESOURCE TRIBES

Senator WEICKER. The next witness is A. David Lester, the executive director of the Council of Energy Resource Tribes.

Mr. LESTER. Thank you, Mr. Chairman.

I am pleased to be here to speak on behalf of the views of the Council of Energy Resource Tribes.

Prior to assuming my duties as executive director of CERT, I served for 5 years as a commissioner for the Administration for Native Americans. I was first appointed in 1978, and later was reappointed in 1981. In 1982, I was promoted to be the executive director of CERT, a chance to work directly on behalf of Indian tribes who are, as you know, and the members of this subcommittee know, on the one hand, among the largest landowners of the United States and, on the other hand, among the poorest population groups in the country.

A couple of important background items—the Indian population of the United States is growing at a phenomenal rate. From 1970 to 1980, by the census count, the population increased 70 percent. It is estimated that in the next 20 years, from 1980 to the year 2000, the Indian population will double again.

What we are not seeing, however, is an investment in the development of local economies that can provide the jobs and income for these people. The investment is not being made by the private sector, nor is it being made by the public sector. This, I believe, is the crux of the reason that the Indian tribes formed a Council of Energy Resource Tribes, to pool their resources in an effort to build stronger local government at the tribal level and to provide the basis, through the development of natural resources, for a stable and balanced economy that can provide jobs and income for a growing population.

We have reviewed the President's Indian policy message, and while we find that that message offers some very laudable goals in terms of work, and that we find ourselves in agreement that those are the goals that the tribes, or at least the membership of CERT, are striving toward—the basic pillars of that statement were tribal self-government and building a local economy, and those are the two basic goals that the tribes have charged CERT to assist them achieve—we find that of all the programs available to assist Indian tribes, the Administration for Native Americans, the program policies for social and economic development, is the only agency who is willing to work directly with Indian tribes on locally developed projects that address locally developed goals responsive to local needs as well as local aspirations.

We find that while Interior, for example, continues to invest millions in its own capacities, including computers and other hardware—they are getting into the third round of buying hardware that hasn't worked yet, and spending millions on that—they invest almost nothing in the capability building for Indian tribes.

The different trend that we see between ANA and other Federal agencies is that while the BIA, the Indian Health Service, which are probably good examples, provide assistance to tribes to help them be better managers of Federal programs, only ANA provides assistance to the tribes so that they can more fully manage their own affairs. That goal of self-sufficiency, that includes both the development of Government capabilities, economic development coupled with social development, is the most balanced approach as we look across the spectrum of Federal assistance.

Our concern is that this year, as I guess OMB is about as traditional as Indian tribes, and they have developed a tradition of trying to do away with the Administration for Indian Americans. Despite the fact that the Assistant Secretary for Human Development consistently over the last 4 years has recommended increases for the ANA Program because of the program's success, OMB has just as consistently recommended cuts. This year they are recommending the elimination of training and technical assistance, which amounts to only $1.7 million, but is critical to the success of the projects that are funded out of this program.

So we believe that it is again an attempt—the one strength that ANA has had over the years is that the programs at the local level have been successful, and we believe that this is an attempt to knock out some of the support structure for the success of the program, so that the agency will be set up to be on the list of agencies that aren't effective any more. We think that that is a big mistake.

The small amount of money that goes in to allow Indian tribes and other native American groups, native Hawaiians, unrecognized tribes, State recognized tribes, and off-reservation communities that technical assistance that they can acquire in the private sector, not depending on Federal expertise but going out and getting their own, is a critical element in their development process.

So we are recommending that that be restored at the minimal level of $1.7 million that we have had for several years.

PREPARED STATEMENT

Senator WEICKER. I thank you very much for your testimony and your statement in its entirety will be placed in the record at this point.

[The statement follows:]

Statement of A. David Lester

The Council of Energy Resource Tribes (CERT) is a coalition of Indian tribes who are dedicated to developing their energy resource potential in a manner supportive of (1) self-government, (2) tribally managed, stable and diversified economies, and (3) a safe, healthful environment. From an initial count of 22 tribes in 1975, CERT has grown to include 39 tribes. CERT reservations include areas as small as 740 acres and as large as the state of West Virginia. Population on these reservations goes from less than 100 to substantially more than 150,000 tribal residents. Collectively CERT member tribes comprise nearly 50% of all Indians living on Indian reservations and more than 60% of all Indian lands in the United States.

These tribes today own a combined total of over 700 million barrels of proven oil reserves; 5,000 billion cubic feet of proven gas reserves; 30 billion tons of demonstrated recoverable coal; and over 17 billion barrels of oil equivalency in uranium. These resources will play a significant role in both our reservation and our national economic future. It is within this context that I would like to discuss the accomplishments of CERT member tribes in 1984-85 and the proposed budget for Fiscal Year 1986.

Descriptions of projects which CERT undertook in FY 1984-85 are listed in table 1. While many of CERT's 1984-85 projects were funded under a federal interagency contract, it should be noted that there are also a number of key projects funded through the Administration for Native Americans. Specific funding sources are noted in table 1.

The range of projects in this table reflects both the wide variance in the needs of CERT tribes and the full spectrum of development stages at which CERT's thirty-nine individual tribes find themselves.

At one extreme are tribes in need of assessment of basic tribal resource and institutional capacity. In the middle are those tribes requiring development impact analyses and various kinds of in-house training. At the opposite pole are those who seek CERT's technical assistance in such current topics as marketing studies, tribal financial management, reservation economic development, and tax and tribal enterprise development.

THE MYTH OF ENERGY RICH TRIBES

The diversity in CERT tribal needs and the spectrum of evolution which this diversity partly represents must not be allowed to obscure two basic facts.

The first is the myth of the "energy-rich tribes." From its inception, CERT has been plagued with the label of "the energy-rich tribes." Some have said about CERT tribes that they, having grown fat on developing their energy resources, are now getting even fatter by uniting into a domestic OPEC. Meanwhile, the argument continues, the poor tribes are getting even poorer.

Nothing could be further from the truth. CERT tribes include both those who have developed their energy resources and those who have not. When such tribes are compared, as was done in a recent CERT project, the results demonstrate that CERT reservation per capita personal income is less than 50% of the national average per capita income ($11,000) (see table 2). This same point about the lack of wealth on CERT reservations can be established by examining the U. S. Census Bureau information on reservation employment. Revised (updated) 1980 census data show that when CERT and non-CERT tribes are compared, the percent of unemployed Indians seeking work differs only marginally (see table 3). Note also in table 2 that where the Gross Reservation Product (GRP) exceeds the national average per capita GNP, the difference is always due to the working interest share of the off-reservation energy developer. These shares never fall under the control of the tribe under most current operating contracts. The bottom line is that CERT and non-CERT tribes are economically very similar. Leakage of fiscal resources from reservations to surrounding non-Indian communities remains a major problem for both CERT and non-CERT tribes.

Table 2. PER CAPITA GRP AND PERSONAL INCOME (dollars)

	Fort Berthold	Spokane	Laguna	Turtle Mountain	Southern Ute	Jicarilla Apache
Per Capita GRP	4,357	11,043	3,411	2,886	41,915	16,515
Per Capita Reservation Personal Income	4,069	5,033	3,411	2,886	4,776	8,917
Working Interest Share	728,728	7,200,000	0	0	27,594,481	15,165,166

Source: Tribal Self-Government: A Self-Sufficiency Analysis. Paper prepared by CERT under Project No. 05-26-43-615-00, October 1983. Contributors: A. David Lester, Ahmed Kooros, Anne C. Seip.

Table 3. NUMBER OF WORKING AGE INDIANS SEEKING WORK

All Tribes	31%
CERT Tribes	32.95%

Data taken from BIA report "Indian Service Population and Labor Force Estimates." See Labor Force Status Note No. 3 for definition of term used in calculation.

THE MYTH OF TRIBAL ENERGY EXPLOITATION

The second myth is that of CERT as the organization "plunging full bore" into rapid energy exploration and development. That CERT both collectively and as individual tribes seeks only to maximize the return on energy development for consumption purposes is a course wrongly attributed to CERT and its member tribes. CERT tribes are pursuing a course based on belief in the stable development of a diversified economy in which energy development is but part of a balanced long-term economic development strategy. Energy development for energy development's sake is simply not an aspect of Council member outlooks. CERT tribes have seen the western syndrome of resource based economies which cycled from boom towns to ghost towns. We are committed to avoiding that cycle for both CERT and non-CERT tribes.

THE 1986 BUDGET AND BEYOND

Current federal administration policy with respect to Indian tribes and tribal social and economic development is a confusing combination of rhetorical commitment to Indian self-government and tribal self-sufficiency on the one hand and resource and financial abandonment on the other.

After a much publicized Presidential announcement in 1983 of ten new initiatives to support tribal self-government and self-sufficiency, the Administration seems to have gone into a state of inertia regarding policy toward tribes. From its 1983 commitment to request a Congressional repeal of House Concurrent Resolution 108 (the termination resolution) to the 1984 Presidential Commission on Indian Reservation Economies, almost no meaningful follow through has been seen on Capitol Hill, in the agencies, or on the reservations.

The Administration for Native Americans (ANA) is currently making a highly commendable effort to direct funds into social, economic, and governmental developments in Indian country. This policy directly implements the federal commitment to self-government and self-sufficiency for tribes. CERT's Executive Committee and its Board of Directors have reviewed ANA's priorities and strongly endorses them. Especially critical is ANA's commitment to the establishment of balanced, stable, long-term economic programs identified and managed by local tribal members. By insisting that all projects which it supports contribute directly to the ability of a Native American community to provide for the needs of its community members and pursue its own social and economic goals, ANA has set a strong example for all federal agencies. By providing a balanced set of program goals that span the topics of governance, economic development, and social development, ANA insures maximum benefits will flow to the recipient groups.

The key phrase in evaluating ANA is "self-sufficiency" and the key question is whether ANA has in fact promoted such projects at its disposal. In the case of CERt and its member tribes receiving ANA support the evidence is overwhelmingly positive. ANA has consistently funded projects that point toward self-sufficiency and strengthens local capabilities to accomplish locally developed goals. This appears to be equally true with all projects funded by ANA.

The problem with ANA is that the funds to support a national program of promoting Native American self-sufficiency are woefully inadequate. Whethr measured by total dollars requested for worthy projects or by total number of project applications ANA is unable to respond to a growing percentage of good local developed initiatives. And now OMB proposes to eliminate ANA supported technical assistance to its funded projects. The Department of Health and Human Services has consistently asked for more funds and OMB just as consistently has cut the budget request. We appeal to this committee to continue its support for this vital program.

It is strongly recommended that the ANA budget be restored to its 1980 level of $34 million, which includes $1.7 million for technical assistance which the Office of Management and Budget has recommended eliminating (see table 3 below).

Table 3

FY 1985	OMB FY 1986 Request	CERT Recommendation
$29M	$27.3M	$34M

This completes my prepared remarks. I will be glad to answer any questions you may have.

Table 1. FY 1985 PROJECT SUMMARY

Project	Project No.	Description	Funding Source	Due Date
Financial Institution Alternative Analysis	040-1287-0	The goal of the project was to make available to tribes an information base on various financial institution alternatives for possible implementation on reservations. The project examines the various options and concludes that the type of institution and the desirability of ownership are dependent on the financial services needed, potential capital base, tribal management capabilities, and regulatory requirements. The experience of those tribes currently considering a financial institution are being incorporated into a report. In addition a model bank feasibility analysis methodology is being developed and tested on one of these reservations. Results will be made available to other tribes.	ANA	03-28-85
Umatilla Enterprise Development	055-1201-3	The goal of the project is to assist the Confederated Tribes of the Umatilla Indian Reservation in realizing their enterprise development and business management goals. Activities focused on establishing and implementing an overall framework within which the tribes could develop their economy. The important elements of the framework included an assessment of tribal resources, an examination of organizational constraints, tribal goals and priorities, the selection of potential development options, and the establishment of a capability to select, evaluate and manage potential projects. Deliverables included a report analyzing tribal tax advantages for promoting economic development, a report assessing organizational and administrative issues, a report assessing the most compatible development options and market analyses, feasibility studies and business plans for selected options.	ANA	03-28-85
Community Development Corporation For Indian Economies	083-1213-0	The goal of this project is to improve the Native American sector of the Yakima Indian Reservation economy by providing a vehicle for tapping equity investment and debt capital not currently available on the reservation, and by providing needed support services to tribal or Indian owned businesses. Project is jointly funded with the Yakima Indian Nation and the American Indian National Bank and is an attempt to exploit regulatory changes which allow national banks to invest up to 2%-5% of their capital and surplus. CERT will monitor and report on the project to HDS and make report available to other tribes.	HDS American Indian National Bank	03-28-86
Fort Hall Mining Renegotiations	055-1211-0	The project involves assistance to negotiators for the Shoshone-Bannock Tribes as they renegotiate an agreement which expires in 1985. Tribes have been given recommendations to either raise the royalty or levy a tax. Of equal importance is the conduct of the study in a manner keyed to tribal assumption of all negotiations. Further negotiations are now pending. The tribes are expected to receive $1.1 million in increased royalty for the operation activity with an additional net present value of $3.1 million for the next 14 years of mining.	ANA	Project Continues in FY 1986

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
Spokane Hydroelectric	055-1214-0	Since 1910, the Washington Water Power Company has utilized 108 acres of tribal lands for a hydroelectric dam site on the Spokane River. The utility has been sued to pay annual charges for the use of the "bid and banks" of the river. The case is to be decided by the Federal Court and FERC. CERT is helping the tribe to quantify annual charges. Impact - The tribe is expected to receive between $2.9 and $4.7 million for the past damages from 1957 to 1984, and $181,000 annually thereafter for the next 20 years. This would represent a substantial increase in tribal revenues.	ANA	Project continues in FY 1986
International Trade for Tribes	058-1203-0	Foreign finances and foreign markets as options for seeking value-added manufacture form the basis of this project. Both the positive and negative features of such joint ventures are outlined.	ANA	05/15/85
Paragon Ranch Project	060-1001-0	Under this grant assistance is being given to the Navajo Tribe regarding its negotiating position on the establishment of a Mw 2000 power plant on the Navajo reservation. The final contract will involve Public Service of New Mexico, the Navajo Tribe, General Electric and Bechtel.	DOE	Continues in FY 1986
Flathead Reservation-Review of Oil and Gas Leases	060-1012-0	Mobil Oil has proposed seismic activity on the reservation, CERT has reviewed the prospecting permit as well as the proposed joint venture agreement.	DOE	Grant continues thru FY 1986
Analysis of Anaconda Settlement (Laguna Pueblo)	060-1021-0	CERT has provided technical assistance in support of Laguna analysis of Anaconda's settlement offers. Impact - The tribe is expected to receive between $58 to 60.5 million in 1985 prices for undertaking reclamation. The project will also create secondary employment of around 60 jobs on the basis of 110 primary positions.	DOE	Project continues thru FY 1986
Navajo Peabody Coal Royalty Determination	060-1027-0	Project supports CERT technical assistance in the completion of a report for the tribal brief and in the renegotiation of a 1964 lease. Eight points originally separated the Navajo and Peabody, including a dispute about the original effective date and a refusal of Navajo to give Peabody an additional 400 million tons of coal. Out of court settlement is expected.	DOE	Project continues thru FY 1986
Presidential Commission on Indian Reservation Economies	061-1000-0	Funds were used to research obstacles to economic development in Indian reservations and recommend ways and means to bring about self-sufficiency and promote self-determination on Indian reservations.	DOE	closed out

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
Coal Valuation	061-1005-0	This project involves an effort to resolve the different ways in which two Interior agencies value coal. The paper concentrates on the point that there must be an allowance for profit in calculating the price of coal. Impact - justification for royalties not less than 12.5%.	DOE	5/85
Monitoring of Indian Resources	061-1009-0	The general issue focuses on the financial impacts of decontrol on Indian income, and forecasts that neglect of the question of who should enforce lease terms after decontrol could result in losses of up to $14-15 million by the tribes.	DOE	05/15/85
Energy Forum	061-1015-0	Funds were used to support two seminars in which tribes, federal officials, and representatives of the private sector were invited to share views on reservation resource developments.	DOE	5/85
Southern Ute Oil & Gas Data Base	060-1043	The Southern Ute Tribe desired to create a computerized Well Data and Production History Data Base. The tribe desired to access existing data bases such as Petroleum Information or Hotline. At the suggestion of the Tribal Energy Office, CERT contacted USGS in Lakewood, Colorado. USGS accesses the P.I. data base to create a report known as the "USGS Digitized Well History." USGS advised CERT that, because of prior contractual obligations with P.I., USGS could release this data to other governmental agencies, not tribes. Arrangements were made through the BIA agency office in Ignacio to have data furnished to the BIA who in turn released the data to the tribe. A $3,000 cost savings over the original cost proposal received from P.I. and Hotline was realized.	DOE	Completed January, 1985 except for Production Data
Albuquerque Area Allottees Oil & Gas Management (Navajo & Southern Ute)	060-1033	This project will provide the designated tribal members with detailed information about the flow of oil and gas royalty payments and related information. Project was previously on hold at request of DOE.	DOE	Initial date 03/18/84. Formal notification of approval received 02/05/85. Revised Date 04/01/85

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
Coeur d'Alene Environmental Baseline Analysis	060-1997-0	Funds were used to establish a reservation environmental baseline assessment regarding air, water, soils, and flora and fauna. Final report recommends establishment of tribal air quality and fish and wildlife monitoring programs.	DOE	10/84
Oglala Sioux Environmental Code Analysis	060-1811-0	Project provides technical assistance to the Oglala Sioux Tribe in the development of their environmental code. Environmental resources will be assessed and subsequent recommendations will be offered that would assist in the code development.	DOE	03/22/85
Review of Jackpile EIS (Laguna)	060-1020-0	CERT technical staff will review EIS documents as they are released by the EIS Task Force. Evaluation will address technical adequacy and completeness of impact analysis, mine reclamation, accuracy of numerical calculations, interpretation of resource data and conclusions.	DOE	03/29/85
NCAI/Nuclear Waste Project	062-1400	This project provides technical assistance and liaison to the National Congress of American Indians in fulfilling its role as a grantee to the U. S. DOE Nuclear Waste Policy Act project. The project is to keep interested Indian tribes throughout the nation informed of activities and progress of the NWPA and its implications to tribes.	NCAI	03/01/85
Umatilla Reservation Nuclear Waste Disposal	064-1411-0	The project is designed to provide technical assistance to the Umatilla Indian Reservation in participation in the Nuclear Waste Policy Act as a designated "Affected Tribe." Primary analysis of this project is the review and preparation of comments on the draft environmental assessment and establishment of a proposed plan and program management. Development of such criteria and assistance to the tribe in negotiating a C. C. Agreement with the U.S. DOE.	CTUIR	09/30/85
Yakima Nuclear Waste Project	069-141-0	This project was implemented to develop a Procurement System with accompanying manual and a Project Management System with accompanying manual and appropriate training of tribal personnel to provide a management structure to be utilized in the tribe's program as an "Affected Tribe" under the Nuclear Waste Policy Act Program.	Yakima	12/31/84
Nez Perce Nuclear Waste Project	061-1406-0	The project provides the tribe with a comprehensive scoping study of existing resources and the potential impacts on these resources from the study of a nuclear waste repository at the Hanford, Washington Reservation. The project also provides technical assistance to the tribe in establishing a nuclear waste program and analysis of the Draft Environmental Assessment of the proposed repository at the Hanford Reservation.	Nez Perce	09/03/85

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
Muckleshoot Drilling	062-0845-0	This exploration project undertook the drilling of two wells. Analysis of the results indicated tht the costs of saline water disposal would offset the value of the natural gas produced.	DOE	03/85
Tribal Financial Management	064-1200-0	The first year of this grant was devoted to the development of a pilot Financial Management Plan for the Fort Peck Reservation. The goal was a plan flexible enough to spread to other tribes. Work was done in conjunction with on-site educational institutions. Starting with a Uniform Chart of Accounts the plan was expanded to include property management functions as well as other monitoring capabilities. Next two years will be devoted to spreading the model to other tribes.	ANA (three year contract	How to manuals already delivered to tribe. These also go to ANA March 30.
Tribal Sand and Gravel Enterprise Development	055-1208-0	Funds were used to assist several Pueblos in the assessment of sand and gravel quality, local markets, transportation costs, etc. Santa Ana is now supplying road and bridge construction projects. Acoma is now pursuing identified market possibilities.	ANA	3/28/85
Tax Seminars	059-1204-0	Two seminars aimed at defining the financial options for developing tribal tax policy within the context of the overall national (and international) tax and energy sales and framework form the basis of this project).	ANA	3/28/85
Blackfeet Remote Sensing	060-1002-0	Funds were used to obtain and analyze federal satellite photographs of the reservation. On basis of this analysis specific field work is recommended to the Blackfeet in the final reports.	DOE	3/85
Coeur d'Alene Energy Resources Appraisal	060-1003-0	This involved CERT technical support of a Phase II (on-site) minerals analysis. The results were basically negative. CERT also carried out curative work at the same time.	DOE	3/85
Chemehuevi Solar Electric Feasibility Study	030-1013-0	The Chemehuevi Tribe is being assisted in its assessment of options for development of a 10 to 30 Megawatt power plant. Three options have been examined: 1) solar through; 2) solar parabolic dish; and 3) salt gradient pond. The final recommendation will endorse the salt gradient option.	DOE	7/85
Dawn Mine Operation and Reclamation Plan Review (Spokane)	060-1014-0	CERT staff has given technical assistance to the Spokane Tribe regarding provisions to be included in a new contract and in a new permit structure. These recommendations will govern Spokane relations with the Midnite Uranium Mine owners when Dawn Co. resumes operations.	DOE	3/85
Zia Oil and Gas Exploration	0.0-1014-0	CERT provided technical assistance in the review of two proposals which Zia received. CERT also helped define a new set of negotiations. CERT recommended that if negotiations proved difficult a request for bids be published.	DOE	

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
Spokane Air Quality	060-1023-0	This represents the second phase of an analysis of the impact of economic development on tribal air quality conditions. The second phase is focused on the impact on the reservation of an off-reservation power plant. Analysis is basically of the trade-offs variety.	DOE	3/31/86
Spokane Uranium Marketing	060-1031-0	Funds are being used to support negotiations for new uranium sales. Negotiations have resulted in a transfer of tax benefits which will allow Western Nuclear to market the uranium at a much lower, and therefore, more competitive price.	DOE	4/85
Fort Belknap Oil and Gas Exploration Assistance	060-1034-0	CERT provided technical assistance in the drafting of a contract which was submitted by the tribe to Montana Power. Negotiations are underway as of 2/8/85.	DOE	Project Ends
Air Analysis of the Bio-Gen Power Plant (Chemehuevi)	060-1035-0	This project supported CERT's technical assistance in assessing the environmental impact of a 14.2 Megawatt plan located off the reservation. No significant impact was detected.	DOE	4/1/85
Tule River New Hydroelectric Feasibility	060-1039-0	The existing power plant has always been rated at 95kw but has never operated above 68kw so far. CERT was funded to assist the tribes indentifying funding alternatives to finance needed improvements.	DOE	6/1/85
Tule River Hydroelectric Assistance	060-1010-0	The funds supported CERT's provision of an economic analysis of California's utility rates and on-site stream flow. Results appear quite promising.	DOE	6/1/85
Hazardous Waste Inventory	061-1025-0	Funds have been used to support two tasks: 1) gather an environmental baseline from each of 25 tribes selected to represent all sizes and regions of both CERT and non-CERT tribes; 2) educate the tribes about the subsequent hazardous waste policy implementation phases.	EPA	3/30/85
High Level Nuclear Waste Project (HLNW)	062-1400-0	In the first phase of this project CERT provided technical assistance to three tribes potentially involved in HLNW: Nez Perce, Umatilla, and Yakima. The next phase will provide similar assistance to the remaining potentially exposed tribes.	DOE (Office of Nuclear Waste Isolation)	Project continues in FY 1986
Jicarilla Classification and Compensation	083-1413-0	CERT staff was hired by the Jicarilla Apache Tribe to develop a personnel code based on Jicarilla's standards. CERT conducted a compensation survey, helped develop the classification plan itself and produced a manual for using the plan for the tribal personnel office and supervisory employees.	Tribal Contract (ANA)	10/84
EPA Indian Policy	061-1016-0	The newly-initiated EPA Indian policy was analyzed by CERT. The results of the analyses were presented at the CERT Fall Conference. Tribal input was obtained and a CERT resolution on the policy was developed. The resolution and policy analysis was submitted to all EPA Indian coordinators.	DOE	3/30/85

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
EPA Air Quality	087-1408-0	CERT provides technical assistance to tribes in developing tribal air quality programs. The assistance includes support in writing proposals, designing monitoring sites, procuring equipment and staff, analyzing data, emission inventory development and project management. Also, CERT administers annual and quarterly workshops for tribes on air quality.	EPA	08/31/85
Menominee Tribe-Crandon Project	068-1409-0	The Menominee Tribe has contracted with CERT to provide an independent analysis of the environmental and socioeconomic impact of a proposed lead-zinc-copper mine to be located near the reservation. To date, tribal concerns have not been addressed by either the company (Exxon) or the state of Wisconsin.	Menominee	—
Indian Land UIC Inventory	050-1024-0	The purpose of this work is to locate and describe injection wells in New Mexico and Oklahoma. Using information available in tribal, state, and federal offices, over 1,000 wells were located. This information will be placed on EPA computer files so that the injection wells can be properly regulated.	EPA	01/28/85
Spokane Air Quality II	080-1023-0	As a continuation of earlier work, jurisdictional issues related to the state of Washington suit (State of Washington vs. EPA) over jurisdiction of state RCRA laws on Indian tribes were investigated. CERT supported EPA as an amicus curiae in the suit. The Ninth Circuit Court of Appeals has recently ruled in favor of EPA (and the tribe).	DOE	02/30/85
Fort Peck Prefeasibility Study of Wind Utilization Potential	080-1029-0	A first-step evaluation of the wind potential on the Fort Peck Reservation was initiated. Using best available information, the wind environment, the wind technology and energy use in the area on evaluation of the value of wind energy will be computed.	DOE	03/30/85
Blackfeet vs. Montana Power	055-1217-0	CERT staff is assisting the Blackfeet in establishing damages and reasonable compensation for more than fifty years of right-of-way operations by Montana Power.	ANA	Project continues in FY 1986
Policy Methods for Tribal Taxation	050-1205-0	CERT is working with four pilot tribes to design, implement, and document a tax program. The project focuses on prior neglect of the "economic" aspects of various tax options. First year has been devoted to establishing background on tribal tax bases and outlining future options for the use of tax programs.	ANA	Project continues in FY 1986

Table 1. FY 1985 PROJECT SUMMARY (Continued)

Project	Project No.	Description	Funding Source	Due Date
Tribal Government Services Management	057-1202-0	The first year of this project including surveying CERT tribes concerning their experiences managing grants and contracts to deliver government services to tribal members. On the basis of the 26 detailed responds, three tribes were selected for an indepth investigation. A methodology for grant and contracts management, to insure they serve tribal goals effectively, was developed and a manual and workshop developoed to transmit the methodology. A pilot workshop was given for the Ute Tribe as a means of further refining the methodology and enhancing the workshop presentation quality.	ANA	Project continues in FY 1986
Tribal Government Services Management (Ute, Cherokee, Chemehuevi, and Yakima)	057-1202-1 057-1202-2 057-1202-3	These sub-projects supported the above approach with the four tribes listed.		
Salish-Kootenai Planning Management	063-1402-0	Salish and Kootenai identified the need for a staff management analyst and contracted with CERT to assist in the selection and training of a tribal member to fill the position. After training, the selected individual has undertaken tribal government reorganization and the development of a program performance system, using a CERT staff as a coach.	Tribal Contract (ANA)	Project continues in FY 86
Jicarilla Classification and Compensation-II	063-1413-0	This project carries forward the initial effort at Jicarilla by providing the tribe with further assistance in implementing the concepts developed earlier with the tribe. Focus in this instance is in implementing a compensation plan in addition to the previously established classification plan and in implementing a merit employment selection process.	Tribal Contract	7/85

STATEMENT OF DALE STUARD, CHAIRMAN OF THE BOARD, HOME BUILDERS INSTITUTE

Senator WEICKER. Our next witness is Mr. Dale Stuard, chairman of the board of Home Builders.

Welcome. We look forward to your testimony.

Mr. STUARD. Thank you, Mr. Chairman.

Good morning, gentlemen. My name is Dale Stuard. I am a builder from El Toro, CA. I am here in my capacity as chairman of the board of the Home Builders Institute. We have been associated with Job Corps since 1974 as a vocational contractor with the U.S. Department of Labor. Through our efforts to train and place corps members, thousands of youth have obtained jobs in our industry. We are justifiably proud of our track record and look forward to many more years of involvement in the program.

I am pleased to present this statement on behalf of many business, labor, and community support organizations associated with Job Corps. A complete listing of those organizations is included in my formal statement.

Mr. Chairman and members, I come to you today with grave concern and fear for the future of Job Corps. This opportunity to present information about the Job Corps' program and its funding needs for fiscal year 1986 is greatly appreciated. Your statements in this committee on behalf of Job Corps have been an inspiration to a system that has been demoralized because of the administration's proposal to terminate it. We turn to you now in our time of greatest uncertainty.

As you know, the Job Corps program has been a long-term cooperative venture between the Federal Government and the private sector. Job Corps has taken the hopeless, the jobless and the truly needy of our Nation's youth and given them a second chance, a chance to obtain an education as well as those consumer and occupational skills necessary to become a contributing member of society. Until a year ago I did not know much about Job Corps, but as chairman of the Home Builders Institute, I have had the opportunity to visit many of our Job Corps centers and have learned a great deal.

I take strong exception to the administration's position that the precipitous withdrawal of all Federal support for Job Corps is a price worth paying as part of the Nation's deficit reduction effort. I know, Mr. Chairman, that you are aware of several studies by such reputable organizations as Mathematica, the National Research Council, the Urban Institute, the Brookings Institution, and others that convincingly show Job Corps return more in cold, hard dollars than it costs, as much as $1.46 for every $1 invested.

As a businessman, I have to conclude that Job Corps is an investment that pays handsome dividends to our society, and these dividends are in the form of constructive taxpaying citizens, not welfare dependents, incarcerated youth and another generation of disenfranchised children. Job Corps can readily claim to be a deficit reduction program, one that deserves to be expanded, not eliminated.

I would like to highlight two important points relative to Job Corps' fiscal year 1986 funding request.

We support the current services funding level for Job Corps of $638 million for fiscal year 1986. While inflation is projected to be 4.9 percent in fiscal year 1986, the figure of $638 million represents a modest 3.4-percent increase. At this funding level, the same number of youth will be served as in fiscal year 1985, approximately 100,000 students through a nationwide network of 107 training centers. This funding level will not allow any expansion of Job Corps centers.

We call your attention to an additional $58 million which, if it becomes available, would completely eliminate a 2-year backlog in major facilities rehabilitation work that is needed on Job Corps centers. This amount has been identified in the Department of Labor 1985 facilities survey. As you know, the physical condition of the Job Corps centers has been a major criticism leveled by the administration.

As a residential training program administered exclusively by the Federal Government, Job Corps is unique with over 2,000 buildings comprising its 107 training centers. These buildings represent a cumulative investment to the Federal Government of over $1 billion in property and equipment. The amount of $58 million, annualized over 2 years, represents less than 5 percent of annual appropriations and this is extremely less than the normal depreciation on buildings.

This is not an excessive capital investment by any standard. The infusion of $58 million in the Job Corps system would ensure that centers' physical deterioration will not continue, potentially threatening the health and safety of the corps members and jeopardize the program's long track record of success.

Mr. Chairman, we recognize that there are tremendous pressures on you and the Members of Congress to hold the line on spending. We think that our proposals for Job Corps are reasonable and defensible. We do understand that an across-the-board freeze and even further reduction in programs under your jurisdiction have been discussed and realize that there is a possibility that funding for Job Corps may be cut somewhat. We also realize that deficit reduction is an important national goal.

For your consideration, we would like to point out the ramifications should a freeze or a 10-percent reduction in Job Corps become unavoidable.

At a freeze at the fiscal year 1985 funding level of $617 million, Job Corps centers would close, training slots would be reduced, and further deferral of needed facility repairs would occur. This may be a surprising and little known fact to the members of this committee.

At a freeze level, Department of Labor projections clearly show that between one and six centers would close and training slots would be reduced by 4 percent.

With a 10-percent funding reduction, center closings would increase to betwen 10 and 24 and training slots would be reduced by 13 percent.

This means that over 13,000 youth could not be served by Job Corps and, as centers shut down across the crountry, these young people would be forced to return to their environments of dispair and failure.

It should also be noted that stringent cost economies have been incorporated into Job Corps in recent years. Administration analyses confirm that further efficiencies are not obtainable. To achieve savings, the only recourse is to close centers and cut back services. Whatever you must do with the fiscal year 1986 budget, please keep in mind the impact you will have on most severely disadvantaged people in this country.

Mr. Chairman, the home building industry and many business, labor, and volunteer organizations believe in Job Corps. It is a program that can be justified on many levels. As the New York Times stated in an editorial on April 11, 1985, "The Job Corps is a human salvage program, the hallmark of a humane society."

On a purely economic level, the case can be made that the elimination of Job Corps will exacerbate the deficit, not decrease it. Job Corps reduces the dependency of individuals on entitlements, on welfare, on unemployment insurance, on institutionalization and incarceration, all much costlier alternatives. Job Corps, instead, adds revenues to the Federal Government by turning disadvantaged unemployed youth into productive taxpayers for their lifetimes.

The Home Builders Institute and its many associates in the business, volunteer, and labor community stand ready to constructively assist you in saving the Job Corps in any way we can.

I thank you and the distinguished members of this committee for the commitment to and support of Job Corps, past and present. With deep conviction, I urge that this valuable program be retained in the fiscal year 1986 budget as it embarks on its third decade of service and achievement.

Senator WEICKER. Thank you very much, I could not have said it better myself.

Senator Proxmire.

Senator PROXMIRE. Thank you, Mr. Stuard, for a fine statement. I was impressed to see your list of Job Corps supporters.

Mr. STUARD. It really surprised me, Senator. In the short period of time that I have been involved with Job Corps, it seems to me that Job Corps has been one of the best kept secrets we have at the Federal Government level. I think that the industry can take some blame that we have not done a better job of building a support level for this group because it certainly is something that this whole Nation can be proud of and anybody would support it if they only knew that is happening.

Senator WEICKER. Thank you.

STATEMENT OF MICHAEL URQUHART, PRESIDENT, LOCAL 12, AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

Senator WEICKER. The next witness is Mr. Michael Urquhart, president, local 12, American Federation of Government Employees.

At this stage, I am going to turn the Chair over to my good friend Senator Proxmire.

Mr. URQUHART. Mr. Chairman, and Senator Proxmire, I would like to thank you and other members of the committee for allowing us to testify today on the Labor Department's budget request for fiscal year 1986.

My name is Michael Urquhart, and I am the president of local 12 of the American Federation of Government Employees, which represents 5,000 employees in the Washington metropolitan area, and I am accompanied today by David Schlein, our head steward and head lobbiest for the local.

Federal employees understand the need to eliminate waste and inefficiency in order to save money and reduce the deficit, but it makes little sense to rob Peter to pay Paul, or to trade black ink today for red ink tomorrow. The programs that we will address today have all proven their value to the American people.

The Labor Department's budget for the last several years has been cut more than 50 percent, with a 25-percent reduction in staff. There is no more fat left. Further cuts will result in reduced protection for the American working people, and will actually increase Government costs in the long run.

Too often, cuts are justified solely by the need to reduce expenditures. No serious argument is made that such cuts will not impair the efficiency of the programs. Let me cite a few examples.

When OSHA refused to issue field sanitation standards, Assistant Secretary Rowland partly justified his action on the grounds that OSHA lacked the personnel to enforce any new standards.

The Deficit Reduction Act of 1984 mandated mandated dollar savings, and agencies were told to cut whatever was necessary to achieve those results. One casualty of this approach was the award winning Monthly Labor Review, which has a paid circulation of 13,000 per month.

At the Employment Standards Administration, claims to be reviewed continue to increase while staffing and budget decrease. For example, in the Office of Federal Contract Compliance Program, the number of compliance reviews is increasing from 5,450 to 5,850 while staff is reduced from 964 to 922. The result is an increase in the work quota on individual employees, a decline in the quality of the investigations and increased delays in payments.

I would like to turn now to some of the specific proposals in the Department's budget request for fiscal year 1986.

Outside of the administration, no one favors the elimination of the Job Corps, and for good reason. It is a program that not only works but is also cost effective. As the Mathematica study demonstrated, the Job Corps return $1.46 for every $1 spent.

The administration claims that the same goals could be achieved through the Job Training Partnership Act [JTPA] but JTPA was never designed to reach the population that Job Corps does, the disadvantaged youth with no high school education and little prospect for employment.

According to the Washington Post on April 22, 1985, the administration does not even seriously challenge the success of the program, but simply views it as "just another chip to trade with."

Previously, the Labor Department had characterized the program as the "last, best hope to join the societal mainstream" for the youth that it serves. Don't take away that hope.

The Work Incentive Program has not received the publicity that Job Corps has received, but it has equally proven itself as a cost-effective program that has demonstrated its ability to assist AFDC recipients and applicants to find unsubsidized employment.

Approximately 75 percent of those served are single mothers who would not be assisted by JTPA. Each dollar invested in WIN saves more than twice as much in reduced welfare grants and other costs such as reduced case loads, food stamps, Medicaid, et cetera. The cost of the WIN Program is less than 2 percent of the over $14 billion spent on AFDC grants last year. We believe that funding for the WIN Program should be continued.

In the previous year, the Department consolidated administrative functions for five of the smaller agencies into the National Capitol Service Center, which is under the authority of the Assistant Secretary for Administration and Management. The Department now plans to complete this consolidation for the rest of the Department.

Such reorganizations are costly and disruptive, and one would expect that serious examination of the projected efficiencies will be prepared, and none have been. In fact, the Bureau of Labor Statistics has demonstrated that these administrative functions are performed more efficiently in BLS than in the current National Capitol Service Center.

In addition, serious questions have been raised about the potential political impact of such a consolidation on BLS, a consolidation which would threaten BLS's well deserved reputation for the integrity of its statistical programs. We believe that this further consolidation should be canceled.

The administration has proposed a $5 million rescission from the fiscal year 1985 BLS appropriation for the development of a permanent mass layoff and plant closings study. This study could provide for the first truly comprehensive statistics on plant closings and its impact on laid off workers.

For the first time, the United States would have the information necessary to quantify the complex problems that plant closings and the resulting unemployment and underemployment. The statistical information generated could be important in understanding the need for unemployment insurance, trade adjustment assistance, and other Government programs.

BLS has the machinery in place to do this study and expand it to all 50 States. We urge you not to rescind the appropriation for fiscal year 1985 and make a suitable appropriation for 1986.

Finally, in summary, we urge you to take the following action with regard to the Labor Department's appropriation for fiscal year 1986:

One, continue funding for the Job Corps and WIN.

Two, provide funds for the mass layoff and plant closing survey.

Three, restore full funding for the Monthly Labor Review.

Four, provide money to increase enforcement staff in MSHA, OSHA, and ESA.

Five, add language to bar the use of funds for any further consolidation of administrative functions, with special consideration to the necessary political independence of BLS.

Six, reject the proposal for across-the-board staff cuts of 4 percent.

Seven, reject any cuts and restore full funding for personnel expenses.

Eight, stop the small region initiative which proposes to close three regional offices of the Department of Labor.

PREPARED STATEMENT

Senator PROXMIRE [presiding]. Thank you Mr. Urquhart. We will insert your statement in the record at this point.

[The statement follows:]

STATEMENT OF MICHAEL URQUHART

I welcome this opportunity to testify on the Department of Labor's budget request for fiscal year 1986. My name is Michael Urquhart. I am appearing before your committee on behalf Local 12, American Federation of Government Employees, which represents 5,000 Department of Labor employees in the Washington metropolitan area.

The Department of Labor was established to promote the welfare and working conditions of working people in this country. Clearly, it cannot fulfill that mission if it is denied the resources to carry out the programs that have been developed over the years and mandated by Congress. The proposed budget for FY 86, following three years of budget reductions, raises serious questions about the committment of this administration to the agency and its programs.

During this administration, the Department of Labor's budget has been reduced more than 50 percent. While some cuts may have been justified on the basis of program changes and more efficient operations, past and proposed cuts now threaten the viability of some programs and will reduce the efficiency of many others. The result will be reduced enforcement, increasing delays, and in many instances an increased threat to the health and safety of the American people.

The budget process at DOL has too often been characterized by across the board cuts -- a 10% funding cut here, a 5% staff cut there, etc.. Too often, cuts are justifed solely by the need to reduce expenditures. No serious argument is made that such cuts will not impair the efficiency of the programs.

Let me cite a few examples:

1. When the Department refused to issue field sanitation standards, Assistant Secretary Rowland partly justified his action on the grounds that OSHA lacked the personnel to enforce any new standards.

2. Many administrative functions are being consolidated in one office in conjunction with budget plans to cut certain administative positions by 10 % (part of the Grace recommendations). This action is taken even

when it can be shown that an individual agency is already more efficient than in those already consolidated.

3. The Deficit Reduction Act of 1984 mandated that OPM develop savings in five specified areas. The Department of Labor accepted 72% of the proposed cuts, double what any other agency accepted. Agencies were simply given dollar figures, and told to cut whatever was necessary to achieve those results. One casualty of this approach was the award winning Monthly Labor Review (MLR), which has a paid circulation of 13,000 per month. How much will this cost BLS in lost subscription revenues? How will the information collected by the BLS be debated and explained to the public if not in the MLR?

4. At the Employment Standards Administration claims to be reviewed continue to increase while staffing and budget decrease. For example, in the Office of Federal Conract Compliance Programs the number of compliance reviews is increasing from 5450 in FY85 to 5850 in FY86 while staff is reduced from 964 to 922. Similarly, the backlog of FECA and Black Lung claims will increase as staff is reduced. The result is an increase in the work quota on individual employees, a decline in the quality of the investigations and increased delays in payments.

I would like to turn now to some of the specific proposals in the Department's budget request for FY 86.

1. ELIMINATION OF THE JOB CORPS.

Outside of the Administration, no one favors the elimination of the Job Corps. And for good reason -- it is a program that not only works but is also cost effective. As the Mathematica Study demonstrated, the Job Corps returns $1.46 for every $1.00 spent.

The Administration claims that the same goals could be achieved through the Job Training Partnership Act (JTPA). But JTPA was never designed to reach the population that Job Corps does - disadvantaged youths with no high school education and little prospect of employment.

According to the Washington Post on April 22, 1985, the Administration does not even seriously challenge the success of the program, but simply views it as "just another chip to trade with."

Previously, the Labor Department had characterised the program as "the last, best hope to join the societal mainstream" for the youth that it serves. Don't take away that hope.

2. WORK INCENTIVE PROGRAM (WIN)

The WIN program has not received the broad publicity given the Job Corps but is just as deserving of your support. WIN has proven itslf as a cost effective program that has demonstrated its ability to assist AFDC recipients and applicants to find unsubsidized employment. Approximately 75% of those served are single mothers who would not be assisted by JTPA. Each dollar invested in WIN saves more than twice as much in reduced welfare grants and other costs such as reduced case loads, food stamps, medicaid, etc.. The cost of the WIN program is less than 2 percent of the over $14 billion spent on AFDC grants last year. We believe funding for the WIN program should be continued.

3. CONSOLIDATION OF ADMINISTRATIVE SERVICES:

In the previous year the Department consolidated administrative functions for five of the smaller agencies into the National Capitol Service Center which was under the authority of the Assistant Secretary for Administration and Management. The Department now plans to complete this consolidation.

In the past, those functions which are now being consolidated (personnel, procurement, financial, payroll) were decentralized in order to promote efficiency. Now they are reversing the process, once again to supposedly increase efficiency. Such reorganizations are extremely costly and disruptive, and one would expect that serious examinations of the projected efficiencies would be prepared. None have been.

In fact, the Bureau of Labor Statistics (BLS) has demonstrated that these administrative functions are performed more efficiently in BLS than in the current NCSC. And our own experience working with the NCSC and individual agencies, is that the turnaround time from the NCSC is much greater with deadlines more frequently missed.

In addition, serious questions have been raised about the potential political impact of such a consolidation on BLS. This agency has a well deserved reputation for the integrity of its statistical program. Placing its administrative functions under the Office of the Assistant Secretary for Administration and Management threatens to politicize BLS, since it would lose control over recruitment, hiring and personnel actions.

3. ELIMINATION OF THE PERMANENT MASS LAYOFF AND PLANT CLOSING STUDY.

The Administration has proposed a $5 million recision from the FY 1985 BLS appropriation for the development of a permanent mass layoff and plant closings study. This study could provide for the first truly comprehensive statistics on plant closings and its impact on laid off workers. Information generated would include the number of firms, the number of effected workers and the number of workers staying on Unemployment Insurance (UI) by state, industry and by reasons for layoff. Furthermore, a statistical sample of those who received final UI payments would be tracked for subsequent employment experience.

For the first time, the United States would have the information necessary to quantify the complex problem of plant closings and the resulting unemployment and underemployment. The statistical information generated could be important in understanding the need for UI, trade adjustment assistance and other government programs. Unless such a study is done we do not really know whether the current economic recovery has minimized the problem or whether the Administration's rhetoric has merely wished it away.

BLS has the machinery in place to do this study and expand it to all 50 states. We urge you not to rescind your appropriation for FY 1985 and to make a suitable appropriation for FY 1986.

SUMMARY

Federal employees understand the need to eliminate waste and efficiency in order to save money and reduce the deficit. But it makes little sense to rob Peter to pay Paul, or to trade black ink today for red ink tomorrow. The programs we have addressed today have all proven their value to the American people. The Labor Department has made substantial cuts during the last four years. There is no more fat left. Further cuts will result in reduced protections for the American working people, and will actually increase government costs in the long run. We therefore urge you to take the following actions with regard to the Department of Labor's appropriation for FY86:

1. Continue funding for the Job Corps and WIN.
2. Provide funds for the Mass Layoff and Plant Closing Survey.
3. Restore full funding for the Monthly Labor Review.
4. Provide money to increase enforcement staff in MSHA, OSHA, and ESA.
5. Add language to bar the use of funds for any further consolidation of administrative functions, with special consideration to the necessary political independence of BLS.
6. Reject the proposal for accross the board staff cuts of 4 percent.
7. Reject any pay cuts and restore full funding for personnel expenses.
8. Stop the small region initiative.

Senator PROXMIRE. I especially appreciate your reference to the Bureau of Labor Statistics. I agree with your recommendation. I follow this agency very closely in the Joint Economic Committee, and I certainly will be very interested in the way in which the reorganization is implemented.

Senator Burdick.

Senator BURDICK. I have only one question. On page 4 of your statement, "the Mathematica study demonstrated that the Job Corps returns $1.46 for every $1 spent." Could you amplify that, could you describe the return?

Mr. URQUHART. Those returns are not directly to the Federal Government per se, the return is to society. That is the estimate that the Mathematica study came up with with regard to the taxes that came from the employed youth, the reduced costs to society with regard to incarcerations, and other savings like that. I don't have the details before me of exactly how they computed the $1.46, but we could get that.

Senator PROXMIRE. Could you get those details and make them available to the committee?

Mr. URQUHART. Yes.

Senator BURDICK. It is a pretty powerful argument.

Senator PROXMIRE. Together with the previous witness, Mr. Stuard of the Home Builders, you did a very good job of justifying on the Job Corps Program.

ADDITIONAL PREPARED STATEMENTS

Thank you very much.

Your statement will be included in the record at this point, along with other statements submitted for the record on appropriations for the Labor Department.

[The statements follow:]

LETTER FROM SIMON C. KELLY, EXECUTIVE DIRECTOR, AID FOR THE RETARDED, INC.

APRIL 16, 1985.

HON. LOWELL P. WEICKER, JR.,
U.S. Senate, Chairman, Subcommittee on Labor, Health and Human Services and Education, Committee on Appropriations, 131 Dirksen Senate Office Building, Washington, DC

DEAR MR. SOURWINE: We understand that Senator Weicker will be holding 8 days of public hearings in Washington beginning May 1, 1985, concerning fiscal year 1986 appropriations for the Department of Labor.

We would like to submit the following statement for the record concerning reductions in appropriations for the Department of Labor which will result in the abolishment of the New England region due to the proposed consolidation with New York.

The board of directors of Aid for the Retarded, Inc., 174 Richmond Hill Avenue, Stamford, CT, protests the closing of the Boston regional office of the U.S. Department of Labor as it will result in extreme difficulty in conducting a sheltered workshop in accordance with the Department of Labor regulations. We cite the following considerations:

1. The consolidation with New York would result in an unwise curtailment of staff, as we find that the Boston regional office is already having difficulty in coping with

the amount of work required of it with its current limited personnel. This results in unnecessary delays in the processing of forms and certifications necessary to conduct a sheltered workshop program.

2. Over the years the staff at the Boston regional office has built up a personal contact with the various agencies that it serves. This clearly facilitated the conducting of business where an answer or inquiry could readily be solved by a telephone conversation with a member of the Boston regional office staff. This has eliminated a great deal of paper processing and unnecessary letter writing.

3. The consolidation with New York, we feel, would result in a too large and cumbersome bureaucracy in which all would suffer because of the numerous agencies that would be involved. This we know from experience would result in unnecessary delays, frustration, and inaccuracies in the carrying out of the regulations of the Department of Labor.

Sincerely,

SIMON C. KELLY,
Executive director.

LETTER FROM ERIC KARL SANDBERG, MA, NCC, DIRECTOR OF VOCATIONAL SERVICES, RELIANCE HOUSE, INC.

APRIL 17, 1985.

HON. LOWELL P. WEICKER, JR.,
U.S. Senate, Chairman, Subcommittee on Labor, Health and Human Services and Education, Committee on Appropriations, 131 Dirksen Senate Office Building, Washington, DC

DEAR MR. SOURWINE: We understand that Senator Weicker will be holding 8 days of public hearings in Washington beginning May 1, 1985, concerning fiscal year 1986 appropriations for the Department of Labor.

We would like to submit the following statement for the record concerning reductions in appropriations for the Department of Labor which will result in the abolishment of the New England region due to the proposed consolidation with New York.

We would like to add our support to keeping the Boston regional office in operation. We are a new vocational rehabilitation program and have had to turn to this office several times to get clarification on the various DOL regulations that affect our type of establishment. We have found the office staff extremely helpful. They were willing and able to answer questions, were refreshingly free of nonessential bureaucratic mannerisms and had time to do their jobs well and thoroughly. In short they were helpful in ways they could not be if consolidated into a larger office with a larger district.

We have grave reservation that the New York office will be able to absorb the duties of the Boston office and continue to do them well.

Thank you for taking the time to read this. We hope that Senator Weicker will do what he can to keep the regional office in Boston active.

Sincerely,

ERIC KARL SANDBERG, MA, NCC,
Director of Vocational Services.

LETTER FROM PATRICIA A. DIETTE, DIRECTOR OF SERVICES, GOODWILL INDUSTRIES OF WESTERN CONNECTICUT AND SHELTERED WORKSHOP, INC.

APRIL 24, 1985.

HON. LOWELL P. WEICKER, JR.,
U.S. Senate, Chairman, Subcommittee on Labor, Health and Human Services and Education, Committee on Appropriations, 131 Dirksen Senate Office Building, Washington, DC

DEAR MR. SOURWINE: I understand that Senator Weicker will be holding 8 days of public hearings in Washington beginning May 1, 1985, concerning fiscal year 1986 appropriations for the Department of Labor.

I am submitting the following statement for the record concerning reductions in appropriations for the Department of Labor which will result in the abolishment of the New England regional office due to the proposed consolidation with New York.

The consolidation will have an adverse effect on the services which are now provided to workshops for persons with disabilities in New England. Access to the regional office will be more difficult. Under the current system, the hundreds of workshops now being served by the Boston office will lose the personalized services they receive from the staff there. In addition, the consolidation will place an unnecessary strain upon the Department of Labor staff.

Thank you for the opportunity to comment on this proposed change.

Sincerely,

PATRICIA A. DIETTE,
Director of Services.

STATEMENT OF ROBERT M. TOBIAS, NATIONAL PRESIDENT, NATIONAL TREASURY EMPLOYEES UNION

I am Robert M. Tobias, National President of the National Treasury Employees Union. NTEU is the exclusive representative of over 120,000 Federal employees, including workers in all the regional offices of the Department of Health and Human Services. I am accompanied today by Paul Newton, NTEU Director of Legislation and Paul Suplizio, NTEU consultant.

I am pleased to appear before you today to testify on the Administration's budget request for the Department of Health and Human Services for FY 1986. The budget is totally inadequate to the health and well being of the nation's children, our poor, and our senior citizens. For an Administration bent on curbing waste in government, this budget is profligate in the wasted lives it would create through its pennywise and poundfoolish unwisdom.

No segment of HHS is spared severe cutbacks resulting from OMB's clumsy attempts to fit HHS programs into a budgetary straitjacket.

A graphic picture of the extent of the proposed cuts in relation to FY 1984 and 1985 levels is presented in Table 1, appended to our statement. (Our statement does not consider the budget for the National Institute of Health and Centers for Disease Control.)

Mr. Chairman, we believe the Administration's budget for these agencies should be rejected and an alternative budget adopted. To assist the Subcommittee in this task, NTEU has prepared an alternative budget that we believe would remedy the major defects in the Administration's plan at minimum cost. Our budget would simply hold the line and maintain these agencies at FY 1985 levels, plus allow for workload growth in the Social Security Administration. Our alternative budget is presented in detail in Table 1. The total cost of NTEU's recommended additions for these agencies would be $689 million and 5,625 full-time equivalent positions.

Conclusion

It is rudimentary in our constitutional system that Congress has the power to appropriate funds and that, in so doing, it may dictate the objects of public expenditure. Since the Administration has demonstrated its unwillingness to heed congressional dicates contained in report language, it is imperative that Congress specify in appropriations legislation the minimum number of FTE to be maintained.

We strongly urge the Subcommittee to adopt NTEU's budget recommendations contained in Table 1, which are a bedrock minimum to sustain essential HHS programs for another year.

Mr. Chairman, this concludes my testimony. My staff and I will be happy to answer any questions.

Table 1. Department of Health and Human Services Budget for FY 1986 and NTEU Recommendation

	FY 1984 (Actual)		FY 1985 (Incl. Supp.)		FY 1986 (Request)		FY 1986 NTEU Proposal (Changes)		FY 1986 NTEU Recommendation	
	($000) Amount	Staff-Years	($000) Amount	Staff-Years	($000) Amount	Staff-Years	($000) Amount	Staff-Years	($000) Amount	Staff-Years
Office of the Secretary	139,551	2,943	139,678	2,502	135,749	2,412	6,191[a]	+90	141,940	2,502
Office of Civil Rights	18,549	437	17,850	402	15,636	396	1,975[a]	+29	17,611	425
Social Security Administration 1	3,729,241	79,951	3,777,410	78,038	3,911,586	76,345	+180,900[b]	+3352	4,011,585	79,701
Child Support Enforcement	559,490	352	635,000	343	592,101	330	+2,832[c]	+22	549,939	352
Health Care Financing Administration 2	67,451	4,055	71,028	3,980	66,773	3,800	+15,188[d]	+255	81,961	4,055
Office of Human Development Services 3	2,567,139	1,370	2,731,730	1,266	2,710,161	1,206	+32,422[e]	+164	2,742,583	1,370
Health Resources and Services Administration	1,385,524	3,877	1,502,907	3,266	1,157,393	2,381	+350,798[f]	+1140	1,508,191	3,521
Indian Health	778,812	10,687	793,567	10,895	758,543	10,999	+18,575[g]	+125	777,118	11,124
Food and Drug Administration	388,154	7,089	410,328	7,007	409,072	6,906	+17,572[h]	+183	426,644	7,089

1. Limitation on Administrative Expenses
2. Program Management Administrative Costs
3. HDS and Family Social Services

Table 1 Continued

Department of Health and Human Services Budget for FY 1986 and NTEU Recommendation

	FY 1984 (Actual)		FY 1985 (Incl. Supp.)		FY 1986 (Request)		FY 1986 NTEU Proposal (Changes)		FY 1986 NTEU Recommendation	
	($000) Amount	Staff-Years	($000) Amount	Staff-Years	($000) Amount	Staff-Years	($000) Amount	Staff-Years	($000) Amount	Staff-Years
Alcohol, Drug Abuse, and Mental Health Administration	845,015	1681	921,149	1584	886,194	1537	+55,472[1]	+127	941,666	1664
Assistant Secretary for Health[4]	105,572	1165	101,310	1087	105,155	1027	+7,334[3]	+138	112,489	1165

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[4] Public Health Service Management

NOTES

a For General Departmental Management, includes $3,092,000 to restore 90 FTE cut in the FY 86 Budget Request, and $3,099,000 to restore 5 percent pay cut for Federal workers. For Office of Civil Rights, includes $560,000 and 6 FTE to restore cut made in the FY 86 budget request, $623,000 to restore 5 percent pay cut, and 23 FTE costing $792,465 to restore OCR to the level of staffing (425) approved by Congress in the FY 85 appropriation.

b Includes $99,999,000 and 3352 average positions to restore program reductions made in the Administration's budget request, consisting of 158 FTE reduction in staff support levels and 3194 FTE in claimed productivity savings that have not been realized or demonstrated and which are, in effect, disguised program cuts; and $80,901,000 to restore the 5% pay cut for Federal workers. Elimination of these actual and disguised program reductions would restore SSA to the FY 1985 operating level, plus 2,226 FTE needed to handle increased workload associated with processing of disability reviews, implementation of the IRS/SSA interface provision of the Deficit Reduction Act, additional representative payee accountings required under the Disability Benefits Reform Act of 1984, and increased employment for disability work in the Office of General Counsel. These required workload increases are documented in the budget request (pp. 197-198). Last year, in order to prevent a reduction of service to the public, Congress provided $63 million more than the Administration's request and directed that staffing be maintained at the FY 1984 FTE level. The Administration has disregarded this mandate, reduced SSA by 1,913 FTE in FY 1985, and is now proposing a further cut of 1,689 FTE despite the need documented by SSA for additional staff to handle workload increases. Congress should mandate maintenance of the FY 1985 level of FTE's in the Appropriations legislation for FY 86. SSA accomplished much of its work in FY 84 by excessive use of overtime, which Congress has now curtailed. As workload has not generally fallen from 1984 levels, Congress should require the current level to be maintained.

c Includes 22 FTE and $732,050 to maintain the FY 1984 level of Federal administration, plus $1,612,000 to offset reduction for FY 86 hiring freeze, and $494,000 to restore 5 percent Federal pay cut. Caseload continues to rise and funds for State and local administration continue to increase, yet OMB continues to propose reductions in Federal administration of the program. Caseload will rise from 1,186,000 AFDC families assisted in FY 84 to 1,486,000 families assisted in FY 86 -- an increase of 25 percent. In order to maintain program effectiveness, Federal administration should not be reduced below the 1984 level.

d Includes $6,926,000 and 180 FTE to restore cut in staffing proposed for FY 86, plus $2,565,375 and 75 FTE to maintain the FY 84 staff level, and $5,697,000 to restore 5 percent Federal pay cut. Besides implementation of the prospective payment system to curb rising health care costs, HCFA must cope with the growing workload imposed on Medicare providers and contractors by the growing population age 65 and over. This demographic trend combined with increased utilization of health care services has caused an increasing volume of Medicare claims (budget, pp. 119-120). Part A claims workload will increase 13.5 percent in FY 85 and another 6.8 percent in 1986. Part B workload will increase 11.2 percent in FY 85 and 10.5 percent in FY 86. Recent changes made by the Deficit Reduction Act will cause the volume of Part B claims to grow at a higher than average rate. In addition, HCFA must implement the new Participating Physician Program established by the Deficit Reduction Act, and increase technical assistance and monitoring of Intermediate Care Facilities for the Mentally Retarded as mandated by Congress recently. To assure effective Federal program management of these vital programs, HCFA staff should be maintained at the FY 1984 level.

e Includes $1,655,000 and 41 FTE to restore cut in Human Development Services staff; $1,834,000 to restore 5% Federal pay cut; $20,860,000 to restore program cuts in discretionary programs for Child Abuse, Aging, Developmental Disabilities, and Native American programs; $3,804,000 to restore program cuts in Adoption Opportunities and Child Welfare Research and Demonstration in Family Social Services; and $4,269,207 and 123 FTE to maintain OHDS staffing at the FY 84 level.

f Includes $3,564,000 to restore 5% pay cut, $15 million to restore cut in Primary Care Block Grant, 231 FTE and $11,595,000 to maintain funding for the Federal Employees Occupational Health program within the Department of Health and Human Services at the current level, $15,975,000 and 317 FTE to offset the Administration's proposed 40 percent reduction in the Direct Operations program of the Bureau of Health Care Delivery and Assistance, $229,480,000 and 301 FTE to maintain Bureau of Health Professions programs at the level of the FY 1985 appropriation instead of eliminating these programs as proposed by the Administration, 124 FTE and $64,516,000 to restore a proposed 80 percent reduction in the Bureau of Health Maintenance Organization and Resource Development to the level of the FY 1985 appropriation, 105 FTE and $7,168,000 to maintain HRSA program management at the FY 1985 level, and 62 FTE and $3,500.000 to maintain ROFEC at the level of 127 FTE as mandated by the conference report on the FY 1985 appropriations bill.

g Includes $5,535,000 and 125 FTE to restore administrative reduction in headquarters and area offices, and $13,040,000 to restore 5% Federal pay cut.

[h] Restores 82 average positions cut in FY 1985 from the 1984 level, at a cost of $2,710,756; 45 average positions and $3,232,000 administrative cost reduction; $9,778,000 to offset proposed 5 percent Federal pay reduction; $1,851,248 and 56 average positions to maintain FY 1984 operating level and redirect productivity savings to the new cardiac pacemakers registry program, and increased workload under the abbreviated new drug application mechanism. Both of these programs are new missions recently enacted by Congress for which resources were not included in the budget request. With respect to the cardiac pacemaker registry, the Senate stated in its report last year that "The Committee understands that the major resource requirements for FDA will be the establishment and operation of an automated registry system. However, the agency will also need increased staffing to monitor that system, to develop regulations and monitor compliance, and to monitor and assist manufacturers in product testing. Consequently, the Committee will expect FDA to assess the need for additional staff-years and submit a supplemental appropriations request sufficient to meet that need." Despite this injuction, no additional staff has been requested. Because of inadequate resources, FDA's inspections of food manufacturing and storage plants will fall from 11,000 in FY 1985 to 9,000 in FY 1986. New drug applications (NDA's) and new drug application supplements backlog under review and over the statutory time limit continue to increase sharply, from 57 to 147 average monthly backlog of NDA's between FY 82 and FY 84, and from 1,040 to 1,600 supplements in the same period. As the budget shows continuation of FY 84 program levels in FY 85 and 86, no reduction of the backlog will be achieved under the budget request.

[i] Includes $2,391,000 to resotre 5 percent cut in Federal pay, $9,239,000 to restore cuts in mental health grant awards, $35 million to maintain Community Support, State Planning, and Clinical Training programs of NIMH at current levels instead of eliminating these programs as proposed by the Administration, $2,676,000 and 23 FTE to restore cuts in Direct Operations of NIMH, $1,296,000 and 6 FTE to restore cuts in Direct Operations of NIDA, $501,000 to restore cuts in alcoholism grant awards, $980,000 and 2 FTE to restore cuts in Direct Operations of NIAAA, $699,000 and 16 FTE to restore cuts in ADAMHA program management, and $2,689,520 and 80 FTE to maintain ADAMHA at the 1664 FTE staff level mandated by Congress in the conference report on FY 1985 appropriations.

[j] Includes $2,856,000 and 53 FTE to restore cuts in staff and support costs, $1,654,000 to restore 5 percent Federal pay cut, $304,000 and 7 FTE to restore reduction in research staff, and $2,520,180 and 78 to maintain OASH staff at the FY 1984 level.

Letter From Marilyn Jacobs, Director, Rehabilitation Services; and Robert J. Lehmann, Executive Director, Valley Mental Health Center

April 19, 1985

Honorable Lowell P. Weicker, Jr.
United States Senate
Chariman, Subcommittee on Labor,
Health & Human Services & Education
Committee on Appropriations
131 Dirksen Senate Office Building
Washington, D.C. 20510

ATTN: Mr. James Sourwine

Dear Mr. Sourwine:

We understand that Senator Weicker will be holding eight days of public hearings in Washington beginning May 1, 1985 concerning FY 1986 appropriations for the Department of Labor.

We would like to submit the following statement for the Record concerning reductions in appropriations for the Department of Labor which will result in the abolishment of the New England region due to the proposed consolidation with New York.

Over the past several years, Rehabilitation professionals have come to rely on the invaluable technical assistance that the Boston Regional office of the U.S. Department of Labor offers. Because of the intricacies of the sheltered workshop regulations, it is imperative that we keep the line of communication open. If the Boston and New York offices should be consolidated, we would be deprived of a major resource that enables us to serve disabled persons fairly.

Consolidating the offices would not strengthen the services, it would weaken it. Disabled persons who are attempting to become more independent will be adversly affected.

Sincerely,

Robert J. Lehmann
Executive Director

Marilyn Jacobs
Director
Rehabilitation Services

Statement of the Oregon Private Industry Council, Inc.

We request that the following information be included in the official hearings record of the Appropriations Subcommittee to reflect our opposition to proposed rescissions of funding for federal Job Training Partnership Act programs.

The Oregon Consortium is a Service Delivery Area administering Job Training Partnership Act programs in 27 of Oregon's 36 counties. Continued funding at present levels for this program is crucial for us to serve the increasing number of unemployed individuals in our rural area. Because federal rescissions would have devastating effects on our service to the jobless, we encourage the subcommittee to maintain present federal funding levels as follows:

$1,886,151,000	Title IIA of the Job Training Partnership Act grant for service to economically disadvantaged adults and youth.
$ 824,549,000	Title IIB of the Job Training Partnership Act grant for the Summer Youth Employment and Training Program.
$ 225,500,000	Title III of the Job Training Partnership Act grant for service to dislocated workers.

Although economic recovery may be a reality in some parts of the country, Oregon's resource-based economy continues to suffer with massive plant closures and layoffs in the wood products, fisheries and agriculture industries.

Presently, the average unemployment rate in our 27 counties is 15.4% with seven counties over 20%. A recent study on dislocated workers in our 27 counties revealed that more than 8,800 jobs have been lost as a direct result of business closure and layoff in the last 18 months. (Information attached.) When considering the widely accepted multiplier of 2.5* to measure the effect on other business loss, the net effect is a loss of more than 22,000 jobs. This only takes into account dislocated workers, to which we must add the growing numbers of other economically disadvantaged who are eligible for the program.

Present funding levels enable us to serve less than 5% of the 151,205 eligible for our program. In the last seven years, funding for federal job training efforts has been cut by 74%. Each year, we have accepted the challenge of doing more with less to meet the needs of the unemployed. We have streamlined procedures, reduced red tape, designed more efficient training programs and reduced our administrative overhead. We seriously question whether we could sustain services with additional cuts and fear that the rescissions would render our program ineffective.

> We would be forced to close offices throughout our rural communities, hardest hit by the recession, which would severely curtail our ability to reach those in need of services.
>
> We would be forced to lay off necessary staff who are already stretching precious resources to bring valuable job counseling and employment opportunities to our unemployed.
>
> We would be forced to drastically curtail training incentives available to businesses for on-the-job training needed in order to place people in jobs. A recent national study showed that an employer's decision to hire economically disadvantaged individuals was significantly enhanced by offering this incentive.

Although in some areas, allocated resources have not been spent, this has not been the case for our Service Delivery Area. In fact, to answer the pressing needs of an increasing number of dislocated workers, we applied for and received an additional $1 million in national discretionary Title III funds and recently submitted an application for yet another $1.4 million desperately needed for this effort here in Oregon.

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* Connaughton, K. and McKillop, W. Estimation of "Small Area Multipliers for the Wood Processing Sector: An Economic Approach Forest Science, 1979.

We can assure you we are spending our JTPA dollars wisely and effectively. During our transition year, 80% of those leaving our Title IIA adult program entered employment at a cost of $1,999 per individual, 65% of the youth under Title IIA entered employment and 90% of the dislocated workers leaving the program found jobs at a cost of $2524 per person. This seems a small price to pay for putting unemployed Oregonians back on the road to economic self sufficiency and helping them become contributing tax payers in their local communities.

When the Job Training Partnership Act was implemented, private business was challenged. . .to work with our program at the grass roots level and assure that local needs were being met. . .to assist in identifying training and employment opportunities that would benefit our job seekers and. . .to be active, working partners in putting our nation's citizens back to work. We say, without reservation, that those challenges have been met for The Oregon Consortium. More than 200 volunteers throughout our 27 counties are involved. . .representatives of private business, local elected officials, labor and education leaders, economic development and public service representatives have all taken the mandate of the Act seriously and formed a successful partnership that is working. And now, with the proposed federal rescissions, all that we have developed is threatened.

The economic future of Oregon is uncertain, but the proven effectiveness of our job training programs is unquestionable. This valuable program can play a vital role in the economic recovery of Oregon, if only given the chance.

The Oregon Consortium

Business Closures and Layoffs 1983 to Present

Subcontractor #1
(Clatsop, Columbia, Lincoln and Tillamook counties)

Georgia Pacific	**250**	**250**

Subcontractor #4
(Linn and Benton counties)

Champion International	**565**	
Commodore Mobile Homes	**100**	
North Side Lumber	**100**	
United Foods(includes 300 seasonal)	**500**	
Golden West Mobile Homes	**100**	
REM Metals	**100**	
Transition Metals	**25**	
Hobin Lumber	**30**	
Willamette Industries (2 plants)	**400**	
Boise Cascade	**25**	
Simpson Lumber	**100**	**2045**

Subcontractor #6
(Douglas county)

Hanna Nickel Mine	**250**	
International Paper	**300**	
Bohemia Lumber	**250**	
Mazama Plywood	**200**	
Roseburg Lumber	**150**	
County Government	**75**	**1225**

Subcontractor #7
(Coos and Curry counties)

Champion International	300	
Weyerhaeuser	250	
South Coast Lumber	40	
(This 2-county coastal area relies on the fisheries industry, 50% of which sources report has gone out of business or is verging on bankruptcy, affecting more than 200 workers.)	200	790

Subcontractor #9
(Hood River, Wasco and Sherman counties)

Champion International	94	
Martin Marietta	425	
Commonwealth Aluminum	180	
Diamond Fruit	300	
Major retailers	55	1054

(Sources report that Commonwealth Aluminum will close another plant in July, 1985, laying off 900 employees.)

Subcontractor #10
(Crook, Deschutes
and Jefferson counties)

U & I Gourmet Foods	60	
North Pacific Wood Products	100	
Deschutes Bank	30	
Mainline Wood Products	60	
Cascade Pine Specialties	24	
Pacific Northwest Bell	20	
Oregon Refrigeration Equipment	20	314

Subcontractor #11
(Klamath and Lake counties)

Railroad (Burlington Northern, etc.)	400	
Weyerhaeuser	1200	
D.G. Shelter Products	200	
State Line Forest Products	50	
Alpine Veneer	70	
Pacific Northwest Bell	25	
Construction companies	200	
Electronic companies (3 plants)	80	2225

Subcontractor 12
(Gilliam, Grant, Morrow, Wheeler
and Umatilla counties)

McNary Wood Products	35	
Pacific Northwest Bell	26	
Louisiana Pacific	175	
Eastern Oregon Hospital	220	456

Subcontractor #13 **(Baker, Harney, Malheur, Union and Wallowa counties)**		
Silves River Lumber	**29**	
Boise Cascade	**258**	
Mining Industry	**60**	
Ellingston Lumber	**100**	
General Telephone	**47**	**494**
	TOTAL	**8853**

Factoring in the widely accepted multiplier of 2.5* to assess the total impact on local economies, the net effect could be the loss of as many as 22,133 jobs in our 27 counties.

*** Connaughton, K. and McKillop, W. Estimation of "Small Area" Multipliers for the Wood Processing Sector: An Economic Approach Forest Science, 1979.**

LETTER FROM HERBERT L. TURNEY, WIDETT, SLATER & GOLDMAN, P.C.

April 30, 1985

Mrs. Patricia Falsey
United States Senate
Subcommittee on Labor, Health
and Human Services and Education
Committee on Appropriations
131 Dirksen Senate Office Building
Washington, D. C. 10510

Re: Fiscal Year 1985 Appropriations,
U. S. Department of Labor

Dear Mrs. Falsey:

In response to your letter of March 11, 1985 and our recent telephone conversation, while I very much appreciate the opportunity to appear before the above Subcommittee, I regret that I will not be able to come to Washington to do so. However, on behalf of the firm of Widett, Slater & Goldman, P.C., I would hereby request that the following statement be accepted for the Record in the appropriations hearings for the Department of Labor. In particular, this statement is submitted with regard to the proposed reductions in appropriations for the Department of Labor which will result in the abolishment of the New England region due to the proposed consolidation with New York.

As active practitioners in the field of labor and employment law, we deal on a regular basis with the office of the Regional Solicitor. In particular, my partner, Samuel Leiter and I represent management quite frequently before Albert H. Ross, Regional Solicitor and his staff, with respect to matters the Regional Solicitor's Office is prosecuting under FLSA and OSHA. Occasionally this involves litigation in the Federal Court in Boston and elsewhere in New England, but most commonly, we work with the Solicitor's Office to settle such matters before trial.

Since most of these client companies are based in New England, and with our office in Boston, the fact that the Solicitor's Office is located in Boston obviously facilitates such settlements. It is our belief that if we had to deal with a Solicitor's Office located in New York, the opportunities for such settlements would be lessened and the frequency of full-blown federal court trials would increase. This would result in unnecessary expense to the government, as well as to the public, and would further clog the federal court docket.

For these reasons, among others, we wish to go on record as opposing the proposed removal of the Solicitor's Office to New York and would urge that it remain in Boston.

Very truly yours,

Herbert L. Turney

Herbert L. Turney

STATEMENT OF LILLIAN ROBERTS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF LABOR

OVERVIEW: THE NEED FOR EMPLOYMENT AND TRAINING SERVICES

The need for employment and training services in New York, and in the nation, has not abated to the degree expected in view of the decline in the national and state unemployment rates by 3 percentage points since mid-1983. New York now has an unemployment rate of 7.2 percent. The 600,000 unemployed job seekers represented by this figure face job market problems unparalleled in prior "recovery" periods.

That their needs far exceed available resources can be seen clearly in an examination of the data on long-term unemployment; the unemployment problems affecting minorities and youth; the problems facing the growing number of women in the labor market; and the continuing adjustment problems of dislocated workers. For example:

- While the current unemployment rate is virtually the same as the 1980 level, the cumulative weeks of unemployment nationally, i.e., the number of unemployed multiplied by the weeks they have been out-of-work, has increased 58 percent, from 90 million in 1980 to 143 million in 1985.
- Unemployment for minority youth still hovers around 50 percent in New York.
- 2.1 million adults in New York are under the poverty level.
- A dramatically expanding number of women are entering the labor force and half of them are concentrated in only 20 job categories.
- More than 200,000 Dislocated Workers identified in New York alone.

These problems and challenges affect hundreds of thousands of job seekers in New York State alone. The resources currently available from federal, state, local, and private sources can reach only some of them. Each of the programs discussed below has a significant role in meeting our responsibility to those who want to work to maintain a decent standard of living, and in sustaining the national obligation to maintain the strength of the nation's human resources.

BUDGET IMPACT & RECOMMENDATIONS

WAGNER-PEYSER ACT (JOB SERVICE)

As a result of 1982 changes in the Wagner-Peyser allocation formula, New York State's share of national funding has been reduced by 10 percent each year since FY 1983, with a total staffing loss of 276 positions. Since the Job Service provides direct services to the public, staffing reductions translate into decreased service levels. Thus, losses in Job Service funding affect both job seekers and employers.

In New York State, the Administration's proposal for FY 1986 will mean that:

- o The state's PY 1986 funding will be reduced by $8.7 million, to $53.7 million.
- o A total staffing loss of 476 positions is projected from the PY 1984 level with services decreased as follows:
    - 66,000 fewer individuals will be placed in jobs during PY 1986, including veterans, minorities, youth, and unemployment insurance recipients.
    - If 11,000 fewer unemployment insurance recipients are placed in jobs prior to the end of PY 1986, an additional $15.1 million in UI benefits would be paid out. This is the equivalent of more than 1 3/4 times the $8.4 million reduction in Wagner-Peyser funding.
    - 80,000 fewer job orders will be filled for employers.
    - Job Service local offices will be reduced in number, particularly in rural areas, where offices are already small and staffing minimal.
    - Despite continued emphasis on coordination with JTPA, resource cuts will jeopardize the Job Service's ability to provide placement and counseling of eligible JTPA clients for Service Delivery Areas (SDAs).

Recommendations

The $37 million cost of living increase approved by Congress has been impounded by the Administration. We urge Congress to direct that these funds be released.

Since the costs of staff and office space will continue to increase for the foreseeable future, we urge that the reduction proposed for FY 1986 be replaced by a 6 percent inflationary increase to $826.4 million to meet the escalation in the cost of living. This action would permit this program, which has already been substantially cut, to maintain its present structure.

UNEMPLOYMENT INSURANCE

During FY 1984, 7.3 million New York State workers and 407,000 employers were covered by the UI program with a weekly average of 225,000 persons receiving benefits.

In New York State, the Administration's proposal for FY 1986 will mean that:

- o There will be a total staff reduction of between 600 and 1,000 employees between the second half of FY 1985 and 1986, which will be exacerbated by a further reduction in non-personal service funding.
- o In combination, these reductions will have a devastating effect on the administration of New York's Unemployment Insurance program with the closing of twenty (20) offices now anticipated.

Recommendations

We understand and support the need to reduce the federal deficit. Nevertheless, a salient point must be made. The Federal Unemployment Insurance Tax Act (FUTA) revenues are in a special account which contains the receipts from a separate tax on the nation's employers. This fund supports the administration of the Unemployment Insurance Program, the Job Service, the Targeted Jobs Tax Credit program, and certain administrative activities of ETA. Cutting out much needed services in these areas effectively denies employers services for which their FUTA taxes are earmarked.

Sixty percent of the FUTA funds are specifically dedicated to the ES Administration Account. Its surplus now exceeds $1.4 billion. We urge that the FUTA funds be used, as intended, for the benefit of employers and workers.

This year we urge the shift of $50 million from the UI contingency account to the base allocation, as was done in the FY 1984 appropriation. We also urge that last year's action which provided an additional $20 million for non-personal services be repeated for FY 1985. These two actions would go a long way toward limiting the number of offices which may have to be closed beyond those already slated for closure and assure the continued availability of trained and experienced staff to serve the unemployed who seek the benefits they have earned.

For future years, we urge the inclusion of language in the committee report accompanying the FY 1985 supplemental or the FY 1986 Labor, Health and Human Services, and Education Appropriations bill which will require that the Secretary of Labor budget and allocate sufficient funds to support the number of staff justified by the cost model estimate in each state to the extent supportable by the ES Administration Account. This base staff should be at the full level justified by each state's Minutes Per Unit (MPU's) of work within the cost model. Further, the staffing estimate should be based on the full year average work load rather than on the low quarter.

We also suggest that the funding of non-personal services be freed from the cost model and that funding for office space, heating, lighting, rental, telecommunications, etc., be provided for the necessary and reasonable expense incurred by each state for such purposes.

JOB TRAINING PARTNERSHIP ACT (JTPA)

In New York State, the Administration's proposal will mean that:

- o The estimated PY 1986 funding will be between $124 and $125 million, assuming that New York State's formula share of national PY 1985 funding will remain constant or shift only slightly for PY 1986.
- o Despite the relatively consistent funding level, inflation will reduce the number of Title IIA eligibles who can be served.

Recommendation

The need for job training continues unabated. Therefore, we urge consideration of a 5 percent inflationary increase to $1.9 billion to maintain the present level of the program.

Title IIB

In New York State, the Administration's proposal for FY 1986 will mean that:

- o The demand for services in this program which provides summer jobs and related services for youth, will continue to escalate in view of continued high unemployment rates for youth; particularly minority youth.
- o Thus, the proposed funding reduction will result in a loss of 12,000 summer opportunities for youth.

Recommendation

The proposed reduction should be replaced by a 5 percent inflationary increase to $761 million.

Title III

In New York State, the Administration's proposal for FY 1986 will mean that:

- o The need for services for Dislocated Workers are expected to continue because of plant closings and other dislocations. Current estimates indicate more than 200,000 dislocated workers statewide. Most of these workers will be denied Title III services.
- o Expected reductions in services will mean that in PY 1986, 1,115 participants will be served. This is a reduction of nearly two thirds, with 1,852 fewer served than in 1984.

Recommendation

The program should be funded at the PY 1985 level of $222.5 million.

TARGETED JOB TAX CREDIT (TJTC)

In New York State, the Administration's proposal for FY 1986 will mean that:

- Incentives for more than 50,000 jobs will be lost including jobs for:
  - 31,700 disadvantaged youth
  - 2,100 disadvantaged Vietnam veterans
  - 1,325 disadvantaged ex-felons
  - 1,825 handicapped individuals
  - 13,050 welfare recipients

Recommendation

The effectiveness of TJTC in increasing employment among targeted groups is well documented. Congress should provide a multi-year authorization for this program.

TRADE ACT

In New York State, the Administration's proposal for FY 1986 will mean that:

- $4.3 million in benefit payments for affected workers will be lost.
- More than 5,000 trade-affected workers will be forced to compete for JTPA resources.

Recommendations

New York State urges the continuation of TRA benefit payments for trade-affected workers in FY 1986. The retention of separate TAA funding at the current funding level is also strongly recommended to ensure that trade-affected workers receive the specialized services to which they are entitled.

WORK INCENTIVE (WIN)

New York State is particularly concerned by the proposal to eliminate the WIN program because the Senate budget resolution also incorporates the elimination of WIN, despite its documented effectiveness. New York's Labor Department has just begun implementation of the WIN demonstration option which will extend the program to all geographic areas of the state, provide more comprehensive services and increase Title IVA funds available to the state. The increases in poverty and welfare dependency make this an inappropriate time to discontinue employment services for welfare recipients.

In New York, the Administration's proposal for FY 1986 will mean that:

- There will be a loss of $21.9 million, based on the current funding level.
- Job placements for 16,000 welfare recipients are unlikely to be made through other programs, for a potential loss of over $50 million in welfare savings.
- The improved employment services for AFDC recipients resulting from New York's participation in the WIN Demonstration option will be lost.

Recommendations

The special needs of the AFDC population require intensive employability development services. The WIN program is the foundation for providing those services and should be retained by Congress at current funding levels. New York State has made numerous innovations in its WIN program and strongly opposes its elimination.

CONCLUSION

The programs that we advocate are socially necessary and cost beneficial. At a time when the nation, as well as New York, is undergoing an economic upheaval rivaling the Industrial Revolution of the 1800's, we need to maintain, not eliminate, the programs that can help people cope with these changes. The rational agenda at such a time would involve "investments" in our work force by increasing not decreasing employment security and training resources.

STATEMENT OF WILLIAM L. HEARTWELL, JR., EXECUTIVE VICE PRESIDENT, INTERSTATE CONFERENCE OF EMPLOYMENT SECURITY AGENCIES, INC.

The Interstate Conference of Employment Security Agencies, Inc. (ICESA) is the organization which represents Administrators of the Employment Security System -- Unemployment Insurance and Employment Service programs operated throughout the country. We appreciate the opportunity to submit our views regarding funding for the state-federal employment security system.

The administration of the Employment Security System is financed by a special, Federal payroll tax. These revenues can only be used for this purpose; they cannont be diverted for the support of any other program. Employers can expect to receive an adequate level of services for themselves and their workers in return for paying this tax. However, it is distressing that in a majority of the states the Employment Security System is unable to provide the level of services that employers are paying for and, in some labor market areas, these services do not exist. This situation is the direct result of the dramatic reduction in ES funding which occurred in FY 1981. As a result of that experience, we were forced to close nearly 200 full service offices and lay off approximately 7,500 staff.

I want to make it very clear that this situation is not caused by a lack of available funds; we face this problem because the Administration is holding these dedicated revenues hostage to the deficit. By the Administration's own projection*, the account which houses these tax receipts will have a balance of approximately $1.4B by the close of the current Fiscal Year. Yet, in spite of this, they are proposing the following:

Deferral of $37.0M in Employment Service
Funding for Program Year 1985
(July 1, 1985 - June 30, 1986)

The $37.0M represents five percent of the $777.4M in Employment Service funding that was approved by the Congress and signed by the President as part of the FY 1985 Labor Appropriations bill. If the deferral is not vetoed, the effect would be to reduce ES staffing by approximately 1,000, close 100 local offices, and curtail, and in some instances eliminate, essential labor exchange activities such as counseling and occupational testing.

In the justification accompanying the deferral message, the Administration states that the level of Program Year funds that the ES System would have without the $37.0M (i.e., $740.4M), represents an increase of more than 14 percent over comparable 1983 ES grants. But this so called justification is extremely misleading to say the least. First, the Administration is unjustly using the Fiscal Year 1983 funding level of $634.7M as the base period to compare with the Program Year 1984 level of $740.4M. When these two amounts are compared, we in fact have an approximate 14 percent difference. However, Fiscal Year 1983 ended on September 30, 1983, and Program Year 1984 began on June 30, 1984. For the nine months in between these two periods, the ES was funded at an annualized mark of $707.9M, or approximately 4 percent less than the current Program Year operating level.

*UI Outlook, prepared by the Unemployment Insurance Service, Division of Actuarial Services, April 22, 1985.

The Administration, therefore, wants to create the impression that the current twelve month operating period is supported by 14 percent more money than the preceeding 12 month period. But as you can see this is absolutely false.

We urge you to support a restoration of these funds to the ES System, when the Appropriations Committee considers the FY _85 Supplemental Appropriations bill. The House Appropriations Committee has already taken such action.

Limited ES Funding for Program Year 1986

The Administration's Budget for FY 1986 would provide the Employment Service with $755.2M, or approximately 3 percent less than the $777.4M level approved in the FY 1985 appropriation bill. A recent survey of our members indicates that if the system had to operate at this reduced level, we would be forced to close 125 offices and lay off approximately 1,250 staff. Acceptance of this amount means that the Employment Service System would be forced to operate on essentially the same funding level over a three-year span, and with only a ten percent increase over a period that stretches nearly four years. The survey also indicates that even if funds were maintained at the $777.4M level in FY 1986, there would be a need to close 75 offices and reduce a sizeable number of staff.

The Administration request does not take into consideration the mandatory salary and benefit increases granted to state employees by Governors and state legislators, or inflationary increases in rents, utilities, and other basic costs of doing business.

The Senate-passed Budget Resolution would inflict much greater hardships on the Employment Service System, if adopted. The Senate proposal would reduce ES funding by $63.0M for FY 1986, to a level of $714.0M, and to $522.0M in FY 1987. Further, the budget proposes to target ES resources beginning in FY 1986 to states with high unemployment levels. We have attached an impact statement for the record, concerning the targeting proposal, but I would like to highlight just a few items from the statement at this time:

- Based on the average annual unemployment rate for CY 1984, 15 states were below six percent and, therefore, would receive no Employment Service funds.
- These 15 states comprise 25.4M workers or 22 percent of the labor force.
- Employers in the 15 states would presumably continue to pay the Federal Unemployment Tax at current statuatory rates, but they would receive no ES services.

Even disregarding the targeting proposal, reducing ES funds in PY 1986 to $714M would have serious affects on the ES system. Responses to the survey previously cited, indicate that approximately 2,000 staff would be lost and 200 offices closed. In addition, we would lose nearly 350,000 job placements.

We cannot understand why such a proposal would even be contemplated, given the current source of funding and the impact that such a change would have on ES services, as well as the Unemployment Insurance System.

Given the need to keep pace with normal inflationary changes, as well as salary and benefit adjustments mandated by State governments, we request that this Subcommittee consider funding the Employment Service in Program Year 1986 at $826.4M. This represents a 6.3 percent increase above the FY 1985 appropriated level; and as we have cited earlier in our testimony, there is certainly sufficient resources that continue to build in the Employment Security Administration Account to accommodate such a small increase.

UI NPS Shortfall

Turning now to the Unemployment Insurance Program, I would first like to thank the Committee for its interest in problems surrounding nonpersonal services (NPS) funding for unemployment insurance activities. As you know, the chronic shortage of NPS funds reached a critical level in FY 1984 requiring a supplemental appropriation. This is again the case in FY 1985. ICESA surveyed states in April and found that 40 states anticipate NPS shortfalls totaling over $38M. On May 21, the House Appropriations Committee approved $30M for nonpersonal service shortfalls in a Supplemental Appropriations bill. We urge you to include these additional funds in the supplemental appropriation that will soon be considered by the Committee. The approval of these funds will mean that vital services to the unemployed will continue in many locations where offices would otherwise be forced to close.

While states are grateful to Congress for approving supplemental funds, resources could be managed more effectively if adequate funds were available at the beginning of the Fiscal Year. For this reason, we urge you to add $30M to the amount ($229.8M) in the President's budget request for UI non-personal services for FY 1986. This action would maintain the level of services provided in FY 1985, assuming the supplemental appropriation of $30M is approved by the Committee.

UI Quality Control

There is one additional aspect of the President's budget request for unemployment insurance that concerns us. That is increased funds requested for the Quality Control Program. An additional $17.7M is requested, above the FY 1985 level of $20.8M, for a total of $38.5M for this program in FY 1986. We believe that these additional funds would be better spent to solve problems and improve the program rather than simply developing more precise error-rates. A brief paper outlining our views about this program is attached.

Thank you for the opportunity to submit comments concerning FY 1986 appropriations for the Employment Service and Unemployment Insurance Programs.

May 15, 1985

The Impact of Targeting Employment Service Funds to States with High Unemployment Levels -- Senate Budget Resolution Proposal

Background: The proposal to target ES resources beginning Program Year 1986 originated in the Senate Budget Committee. It subsequently survived the budget compromise, developed by the Senate Republican leadership and the Administration, as well as the deliberations on the Senate floor which ended just recently.

The proposal is actually a one line statement in the Report to the FY 86 Budget Resolution. The only additional information comes from Committee staff who say that funds would most likely be limited to states which have a total unemployment rate at or above 6.0%.

Impact:

- The following 15 states had an annual average unemployment rate for CY 1984 below 6.0% and, therefore, would receive no ES funds:

State	Rate
Texas	5.9
Hawaii	5.7
Colorado	5.6
Maryland	5.4
Kansas	5.3
Rhode Island	5.3
North Dakota	5.2
Vermont	5.2
Virginia	5.1
Arizona	5.0
Massachusetts	4.8
Connecticut	4.6
Nebraska	4.4
South Dakota	4.4
New Hampshire	4.2

In addition, it is worth recognizing that 9 states had an average annual unemployment rate for CY 1984 between 6% and 7%

- Data* as of February 1985 reveal that the 15 states comprise 25.7 million members of the labor force. This represents 22% of the total labor force in our country.

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* Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, April 1985.

- Employers in the 15 states would presumably continue to pay the Federal Unemployment Tax at current statutory rates, but they would receive no ES services.

- In states that would no longer receive ES funds, there would be an immediate financial and operational burden placed on the Unemployment Insurance System. For example, states presently delivering ES and UI services out of the same offices, would be forced into alternative arrangements; the UI work test requirements would be in jeopardy; and the entire cost of certain support functions presently financed by both ES and UI (e.g., automation) would be shifted to UI alone.

- Funding levels for all states could fluctuate widely from year to year assuming level funding. For example, recession level unemployment likely would mean that 53 states would share ES funding that had been divided among 38 states the prior year. Fifteen (15) states would go from zero to something, while the other 38 would be reduced. Many states would be forced to open and close ES offices annually, as fluctuating unemployment rates occur.

- A National Labor Exchange System would no longer exist, eliminating long-standing arrangements between states for sharing job orders and referring applicants.

  In addition, the Interstate Job Bank system would be adversely affected.

- ES operational and administrative support of programs such as JTPA, WIN and TJTC would be eliminated in the 15 states.

- There would be no delivery system in place for employment services to veterans in the 15 states.

- The ability of Employment Security Agencies to continue arrangements with the Bureau of Labor Statistics in support of national statistical programs would be in serious jeopardy.

UNEMPLOYMENT INSURANCE QUALITY CONTROL

Paying the right amount of benefits to only those people who are eligible is a primary objective of state officials who administer the unemployment insurance system. Controlling abuse is essential to maintain public confidence in the Program. In addition, states have a strong incentive to minimize erroneous payments since they waste state funds.

In spite of this strong commitment to payment integrity, state UI administrators are concerned about the design of a Quality Control (QC) Program that the U.S. Department of Labor plans to implement in the unemployment insurance program beginning in July 1985. This paper is intended to briefly describe QC and outline those aspects of the program that are of concern.

BACKGROUND

In 1979, the National Commission on Unemployment Compensation sponsored a study to determine the maximum rate of UI overpayments that could be detected, given unlimited resources for investigations. The study was conducted in six cities. Overpayment rates ranging from approximately 3 percent to 22 percent were detected. The largest single reason for overpayments identified in the study was failure of UI recipients to meet work search requirements.

In response to the results of this study, the Department of Labor developed a state-wide overpayment measurement system, Random Audit, which now operates in 46 states. Experience with Random Audit has confirmed the finding of the six-city study -- inadequate work search efforts are the major reason for payment errors.

DESCRIPTION

Methodology: It is our understanding that QC will use essentially the same methodology for determining payment errors as is now used in Random Audit. That is, a random sample of weekly benefit payments is selected and eligibility investigated to determine whether all requirements were met. This includes checking former employers' records to verify wages used to qualify and attempts to verify work search contacts. In addition, QC is eventually to include a "revenue component" looking at state UI tax collection efforts. State staff will perform QC activities with federal monitoring.

Sample Size: The number of payments investigated will increase from 400 per year in Random Audit to 1200-1600 per state per year for QC.

Other Data: In addition to information related to eligibility, demographic data will be collected through QC for use in research and legislative impact studies.

Cost: The FY'86 budget request includes $38M for QC, an increase of $18M from FY 1985.

Results: States will be required to submit error rate analysis reports and corrective action plans to the Department of Labor (DOL). The Department will publish an error rate analysis report that provides state specific error information. All reports will be available to the public.

Schedule: Proposed regulations are under review by the Office of Management and Budget (OMB). After OMB approval, they will be published with an opportunity for comment. DOL is proceeding with training, using a draft handbook that will also require OMB clearance. Implementation is targeted for July 1985, even if regulations are not final by that time.

ISSUES AND CONCERNS

As it is now designed, QC raises a major philosophical issue involving the respective roles of the state and federal governments in the unemployment insurance program. Unlike other programs for which federal QC systems are required, unemployment insurance benefits are financed almost entirely from state funds. It is appropriate for the federal government to develop QC and make it available to states, but inappropriate to make participation in the system mandatory. Some states already have QC/evaluation systems in place that they believe fill their needs better and cheaper. Responsibility for making accurate payments rests with each state; the decision about methods to ensure payment accuracy within the limits of resources available should also lie with the state.

In addition to the issue of federal and state roles, there are several more technical aspects of the program that give us cause for concern. QC is essentially an expansion of the Random Audit program. The ways that QC will differ from Random Audit invite a legislative response in terms of standards and sanctions, similar to those experienced by the AFDC, Medicaid and Food Stamp programs. These differences and the reasons for concern are outlined below.

- The three-fold increase in the number of payments reviewed (from 400 to 1200-1600) will do little more than make the error rate more statistically reliable -- as it would have to be to support sanctions. It is not likely to provide additional information about where or how errors are occurring than Random Audit does currently. Like Random Audit, the sample and results will be valid only state-wide. A tool that would identify errors at the local office level would be more useful to identify problems and take corrective action.

- State participation in the program will be required as a condition of compliance with federal law. Over the years, states have implemented various DOL-sponsored program/management improvements on a voluntary basis, including Random Audit. The only rational explanation for making QC mandatory is that the results will be used in such a way that states would not participate if they had an option.

- State-specific error rate information will be published at the national level by the Department of Labor. Random Audit data is released by each state at its discretion. Publication of this information at the national level will promote state-to-state comparisons. Such comparisons are not valid for a variety of reasons. Differences in state laws regarding qualifying and eligibility requirements illustrates this point. States with more restrictive requirements will likely have higher error rates than states with less restrictive requirements. Other factors that make such comparisons invalid are differences in demographic characteristics (e.g., urban-rural), and volatility of labor markets. In addition, development of a single measure of quality oversimplifies the complexity of UI administration.

- Demographic data elements will be collected that do not relate to eligibility for UI benefits. Examples are household income and marital status. These are personal questions that have no bearing on an individual's eligibility for UI benefits. Including such questions in a UI payment audit coerces the individual to provide information that is private. Such information would be useful for research purposes, however, the data should be gathered on a voluntary basis, apart from a payment audit system.

- Quality Control will require that detailed records on individuals be maintained and updated for up to ten years after their selection in the QC sample and that these records be accessable by the Department of Labor through a dial-up computer network. States are responsible for the integrity and confidentiality of their records. This access to information about individuals increases the vulnerability of the UI program through misuse of data at the national level.

CONCLUSION

The UI program has an error measurement system in place -- Random Audit. The next step should be to look more closely at the reasons for errors identified by Random Audit and find solutions. The emphasis should be on fixing the problem rather than measuring it more accurately.

More money isn't the solution to every problem; however, the relationship between quality and adequate administrative resources should not be ignored. The additional funds required to implement QC would be better spent to improve program operations.

LETTER FROM TERRY EDELSTEIN, EXECUTIVE DIRECTOR, CONNECTICUT ASSOCIATION OF REHABILITATION FACILITIES

April 8, 1985

Honorable Lowell P. Weicker, Jr.
United States Senate
Chairman, Subcommittee on Labor,
Health and Human Services and Education
Committee on Appropriations
131 Dirksen Senate Office Building
Washington, DC 20510

Dear Mr. Sourwine:

Please accept the following testimony as part of the Record when the Subcommittee on Labor, Health and Human Services and Education begins its deliberations on the FY 86 appropriation for the Department of Labor.

The Connecticut Association of Rehabilitation Facilities would like to go on record in support of maintaining the established Boston Office of the U.S. Department of Labor. Our fifty-five member agencies have established extremely positive relationships with staff from this office. They have received numerous hours of technical assistance so as to comply with the Department of Labor Guidelines for the payment of handicapped workers. The services of the Wage & Hour Compliance Officer have been particularly beneficial in assuring compliance.

I urge the Committee to retain the Boston Office rather than consolidating it with the New York Office.

I would be glad to supply you with specific documentation if you require it.

Thank you for considering these remarks.

Sincerely,

Terry Edelstein

Terry Edelstein
Executive Director

STATEMENT OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

The Associated General Contractors of America (AGC) takes the position that surface mining for stone, sand and gravel should be exempt from the training provisions of the Mine Safety and Health Act of 1977 (Mine Act), and AGC therefore encourages the Subcommittee to insert an exemption for such operations into the FY 1986 appropriations bill. Recognizing that AGC has a sound basis for its position, Congress has inserted an exemption into the appropriations bills for each of the last several years.

In conjunction with construction operations, particularly on highway and bridge projects, many AGC members own and operate aggregate plants and borrow pits. Members rely on their surface operations at these plants and pits for materials necessary for the completion of their construction projects. In this context, members have found the Mine Act's training requirements to stray from their ostensible purpose. The required training is too lengthy, and the subject matter is inappropriate.

Before proceeding, AGC should note that it has long recognized that safety is one key to a healthy and productive construction industry. AGC first published its Manual of Accident Prevention in Construction nearly sixty years ago. That manual is now in its sixth edition.

AGC has also published a Guide for Voluntary Compliance with OSHA, and a separate MSHA Guide. The first manual bridges the critical gap between the regulatory jargon of the OSHA standards and the construction contractor's need for practical, understandable guidance. The second manual bridges a similar gap between MSHA requirements and the contractor's field requirements.

In the area of training itself, AGC offers a Safety Training Course for construction supervisors. Schools, apprenticeship programs, AGC chapters, construction contractors and individuals have all taken advantage of this course.

AGC encourages the Subcommittee once again to exempt surface clay, stone, sand and gravel operations from the training provisions of the Mine Act. For the eight years since Congress passed that statute, the controversy over its requirements and its adminstration. has continued, with AGC committed to a number of permanent changes. Surface construction at mine sites should fall under OSHA and not the Mine Act. Clay, stone, sand and gravel operations also should fall under OSHA. AGC has filed statements and testified on these issues on a number of occasions, and continues to prefer permanent changes, in the belief that OSHA's requirements are more than sufficient to protect the construction workers involved in these activities, and that MSHA should focus on its primary mission: mine safety.

An appropriations bill with an exemption from the Mine Act's training requirements would not ultimately meet these goals, but would alleviate at least some of the problems which the Mine Act has needlessly created for construction contractors.

To be specific, the Mine Act requires twenty-four hours of training for new employees, or employees with no prior experience in the surface mining operations, and eight hours of refresher training, every twelve months, for all other employees. The Subcommittee should consider the consequent burden on a small to medium sized highway contractor who may maintain a secondary sand and gravel operation. Such a contractor will typically have to transfer employees between highway projects and aggregate operations, as needs vary. Even though the contractor already complies with other federal safety and health laws requiring training for construction employees, and apprenticeship and other comprehensive training programs cover questions of safety and health, the contractor faces the prospect of having to engage in lengthy additional training each time an employee is transferred to the aggregate operations. To make matters worse, the additional training required for compliance with the Mine Act must be based on a plan which the Mine Safety and Health Administration has approved, and taught by a similarly approved instructor. The contractor has to pay employees their normal working wages for the time which they spend in training, and has to pay the costs associated with certifying instructors.

Congress has repeatedly recognized that an overly broad and unthinking enforcement of the Mine Act's training requirements will produce inequitable results, and Congress has therefore prohibited MSHA the from enforcing these requirements on certain surface operations, by inserting prohibitions into the Labor Department's appropriations bills. AGC urges Congress to take the same action again this year. For the Labor Department's own part, former Assistant Secretary Ford, as the head of MSHA, has testified that he would support efforts to substitute "appropriate training" for the otherwise rigid twenty-four and eight hour training requirements.

In conclusion, AGC would like to thank the Subcommittee for providing the construction industry with an opportunity to state its views.

STATEMENT OF JAMES G. BOURIE, DIRECTOR FOR ECONOMICS, THE AMERICAN LEGION

Mr. Chairman, The American Legion appreciates this opportunity to express its views on the proposed FY 86 budget for veteran programs administered by the Department of Labor (DOL). Pertinent resolutions adopted by The American Legion are attached, with the request that they be made part of the record.

Veterans programs within the DOL are administered by the office of the Assistant Secretary for Veterans Employment and Training (OASVET) pursuant to Chapters 41 and 42 of title 38, USC. In addition to the administration of programs, it serves as the primary advisor to the Secretary on veteran issues. Yet, its paramount mission is simple - the placement of eligible veterans in jobs. Indeed, veteran unemployment rates over the past few years have declined dramatically, but stubborn unemployment pockets remain among minority and disabled veterans, as well as for older and dislocated veterans.

In a recent survey of California Vietnam era veterans, it was found that Vietnam veterans (those who served "in country") were unemployed an average of fifty weeks (versus national averages of 22 weeks); 75 percent of those surveyed wanted employment training; and that these Vietnam veterans have a median household income 37 percent lower than Vietnam era veterans in the survey and 80 percent lower than the national Vietnam era veterans population. Further, that there are three times as many service-connected disabled veterans among the unemployed and underemployed than among the national Vietnam era population. While these findings center only on one state, we believe they are not so out of line nationally. Our extensive daily contacts with veteran advocates, service providers, federal officials and others underscore the extreme situation among nearly all eras of veterans. No one era or condition of veteran has a monopoly on economic distress.

The DOL's office of Assistant Secretary for Veterans Employment and Training (OASVET) has the burden to see that veterans are placed in jobs. But its mission cannot be fulfilled unless it has the necessary staff and resources to do that job. The American Legion, of course, follows intimately the workings of the OASVET, and we react swiftly when we feel that veterans are not being served as provided for by law. In the years prior to 1980, our concern centered on constant staff cuts and program disruption. However, since 1980, there have been no staff cuts to the Veterans Employment and Training service, which has stabilized the program and allowed it to get on with its primary mission. This situation is largely the result of the leadership shown by officials of the DOL and OASVET and their commitment to veterans.

This is not to suggest, [illegible]. Chairman, that the FY 86 OASVET budget is "fiscally overweight." Indeed, it is within marginal limits to get the job done - no more. In fact, there are some areas that cause us concern; for example, Salary and Expenses of the national and field offices is proposed at $13.1 million to sustain 282 positions. While this figure does not, fortunately, reflect any staff reductions, it is (1) bare minimum, causing deferral of needed additional national support staff; and (2) a reduction of $103,000 in travel funds. This sum may not seem much or very important to some, but it is needed by field Veterans Employment and Training Service personnel who must constantly evaluate veteran services by Job Service offices as required by law and regulation.

Additionally, the Veterans Reemployment Rights program needs to train field caseworkers and others, as that program is a new responsibility of the OASVET. We, therefore, recommend the restoration of the $103,000 in travel funds.

As mentioned, no personnel cuts are anticipated in FY 86. However, rumors abound that the department intends to eliminate its regional offices. This action would also eliminate the nine Regional Directors of Veterans Employment and Training, who are vital links betwen the field and national office. It would, indeed, be difficult, likely impossible, to serve the employment/training needs of millions of veterans nationwide without the proper channels of administrative control. The American Legion is firmly opposed to the elimination of Regional Directors of the Veterans Employment and Training Service.

Disabled Veterans Outreach Program (DVOP) specialists and local veterans employment representatives (LVERs) are the front line troops serving veterans. They are state employees stationed in local Job Service offices and, in the case of DVOPs, also in VA Outreach Centers. Funding for these programs comes from the Federal Unemployment Trust Account. DVOP strength is predicated by legislative formula (38 USC 2003A), and the FY 86 budget calls for 1806 positions at $60.85 million. The figure just recited is that of the Office of Management and Budget, and we have reason to believe that OMB, in formulating DVOP strength, used outdated data, thus underestimating positions by 88. DVOP formulation must be current; a loss of eighty-eight positions is significant, and we therefore urge the DOL to review DVOP strength based on current veteran population data from the Bureau of Labor Statistics, VA and the Commerce Department.

The LVER assignment is based on new/renewal veteran applications to Job Service offices. It is proposed at $50.64 million to support 1,392 positions. We believe this figure to be correct.

Mr. Chairman, other veterans programs administered by the OASVET need also to be reviewed. First, the veterans programs under Title IV-C of the Job Training Partnership Act. Historically, this is the first time veterans have had a separate and distinct training program. Always a target population; never a program. In FY 85, the OASVET was allocated $9.8 million, an amount which was far too little. Yet, in FY 86, the Administration proposed only $7.7 million, a reduction of $2.1 million of badly needed funds. We are, of course, aware that Title IV is based on legislative formula, but the bottom line is that precious little beyond veterans outreach and referral can be accomplished. By comparison, in FY 84, programs for Native Americans totalled $62.2 million, and for Migrant Workers it was $60.3 million. Why must veterans be considered less? Veteran program service providers, due to the scarce availability of funds, have given up. It's not worth their time and effort to establish veterans employment/training programs. We, therefore, urge Congress to significantly increase the Title IV-C funding.

One other veteran program is the Emergency Veterans Job Training Program (PL 98-77); a two-year, $150 million, on-the-job training program paying employers up to $10,000. Begun in 1983, the EVJTP was slow to start, but now is a recognized and popular program, having placed over 24,000 veterans, many of whom would have no other employment/training alternative. The EVJTP is needed for at least two more years and The American Legion fully supports that proposition.

By far, more veterans are placed or served through the efforts of the Job Service than all other veteran programs combined. That system averages 500,000 veterans, of all wars, age, sex, and disability served per year. The Job Service is required to counsel, test, place, and refer eligible veterans. It has, for over one-half century, been the very foundation of veterans employment/training services. Veteran services are indisputably inseparable from the fortunes of the Job Service. We, therefore, are concerned over OMB's proposal to rescind $37 million, allocated by Congress, to the Job Service. Over the past few years, the Job Service has sustained significant cuts in offices, personnel, staff, and services. It has shouldered more than its fair share of cuts. The American Legion supports a strong federally centralized Job Service system. Should OMB be successful in rescinding the $37 million, veteran services would suffer badly.

To conclude, Mr. Chairman, The American Legion feels that, while the proposed FY 87 OASVET budget will cause no major program disruption, the eliminated travel funds need to be restored. We are also opposed to the consolidation of the Department of Labor's regional offices, fearing such action would place too great an administrative burden on the office of the Assistant Secretary for Veterans Employment and Training. Finally, The American Legion is firmly opposed to the $37 million rescission to the Job Service. Those funds are needed to maintain the integrity and stability of a national Job Service system.

SIXTY-SIXTH ANNUAL NATIONAL CONVENTION, SALT LAKE CITY, UTAH
SEPTEMBER 3, 4, 5, 1984

RESOLUTION NO: 216

COMMISSION : FULL FUNDING FOR THE OFFICE OF THE ASSISTANT SECRETARY OF LABOR OR VETERANS EMPLOYMENT AND TRAINING

WHEREAS, PL 96-466 established the Office of Assistant Secretary for Veterans Employment and Training to coordinate and direct all veterans employment/training activities within the Department of Labor; and

WHEREAS, In order to fully implement those pertinent sections of the title 38, USC, as regard veteran employment matters, the Assistant Secretary for Veterans Employment and Training must be fully funded; and

WHEREAS, Underfunding of the Office of Assistant Secretary for Veterans Employment and Training will have a negative impact on the employment/training delivery services to all veterans, especially those of the Vietnam era; now therefore be it

RESOLVED, By The American Legion in National Convention assembled in Salt Lake City, Utah, September 3,4,5, 1984, that the office of the Assistant Secretary for Veterans Employment and Training, U.S. Department of Labor, be fully funded to carry out its mission as prescribed by law and regulations.

RESOLUTION NO: 273

COMMISSION : Economics

SUBJECT : SEEK INCREASE IN STAFF AND SUPPORT RESOURCES FOR EMPLOYMENT SERVICES

WHEREAS, The Employment Service has been in existence over 50 years providing cost free job assistance to applicants; and

WHEREAS, One of the primary missions of the Employment Service is to provide eligible veterans with effective and timely priority service as required by law and regulations; and

WHEREAS, The Employment Service can only provide such priority service to veterans with sufficient personnel and support resources; and

WHEREAS, The demand for all Employment Service programs has outpaced its available resources, having a negative impact on veterans services; and

WHEREAS, The Employment Service is in jeopardy of further losses in staff and support resources; losses which would curtail current and additional services to veterans; now therefore be it

RESOLVED, By The American Legion in National Convention assembled in Salt Lake City, Utah, September 3, 4, 5, 1984, that The American Legion support a strong and responsive central Employment Service system of staff and support resources that would be responsive to the employment needs of eligible veterans.

RESOLUTION NO: 279

COMMISSION : Economics

SUBJECT : EXTENSION AND ADMUSTMENT OF THE EMERGENCY VETERANS JOB TRAINING PROGRAM

WHEREAS, Congress enacted the Emergency Veterans Job Training Program (PL 98-77) to address the disproportionate unemployment and underemployment rate of Korean, Vietnam era and disabled veterans; and

WHEREAS, This two (2) year job program will expire in 1985, with tens of thousands of eligible veterans already certified for the program, but with many unplaced; and

WHEREAS, Under current legislation and regulations the program does not provide sufficient opportunity for maximum participation by eligible veterans; and

WHEREAS, Should the Emergency Veterans Job Training Program expire as scheduled, thousands more eligible veterans would be denied an opportunity to gain economic independence through no fault of their own; now therefore be it

RESOLVED, By The American Legion in National Conviction assembled in Salt Lake City, Utah, September 3, 4, 5, 1984, that The American Legion seek to extend the Emergency Veterans Job Training Program (PL98-77) at least two (2) years beyond its scheduled termination date; and be it further

RESOLVED, That The American Legion seek legislation to amend the Act to provide the greatest amount of participation by eligible veterans.

RESOLUTION NO: 334

COMMISSION : Economics

SUBJECT : ESTABLISH IN LAW THE POSITION OF REGIONAL DIRECTOR OF VETERANS EMPLOYMENT AND TRAINING SERVICE

WHEREAS, The Congress of the United States has enacted legislation providing for a Veterans Employment and Training Service within the Department of Labor; and

WHEREAS, Chapter 41, Title 38, U.S. Code, provides the Veterans Employment and Training Service shall be responsible for job counseling, training and placement services for veterans to be administred by an Assistant Secretary of Labor for Veterans Employment and Training; and

WHEREAS, Regional Veterans Employment Representatives have been appointed, although not authorized by law, to supervise the State Directors and Assistant State Directors of the Veterans Employment and Training Service in their respective regions in serving veterans; and

WHEREAS, The Regional Veterans Employment Representatives, with secretarial assistance, provide a most necessary service in carrying out the mandates of Congress to serve veterans; now therefore be it

RESOLVED, By The American Legion in National Convention assembled in Salt Lake City, Utah, September 3,4,5, 1984, that The American Legion seek legislation to amend Chapter 41, title 38, U.S. Code, to establish the Regional Veterans Employment Representative by law.

RESOLUTION NO: 417

COMMISSION : Economics

SUBJECT : SEEK LEGISLATION TO CHANGE ALLOCATION OF DISABLED VETERANS OUTREACH PROGRAM STAFF FOR OUTREACH PURPOSES

WHEREAS, Public Law 96-466 mandates that not more than three-fourths of the Disabled Veterans Outreach Program specialists in each state shall be stationed at State Employment Security Agency Job Service offices; and

WHEREAS, The other one-fourth of these specialists are to be stationed at Veterans Administration Centers and other sites as may be determined to be appropriate; and

WHEREAS, The purpose of PL 96-466 is to meet the employment needs of veterans, especially disabled veterans of the Vietnam era; and

WHEREAS, The demonstrated effectiveness of the DVOP has been its use of outreach to schools, colleges, veterans organizations, and other places which veterans frequent and through the use of outstationing; now therefore be it

RESOLVED, By The American Legion in National Convention assembled in Salt Lake City, Utah, September 3,4,5, 1984, that The American Legion seek legislation to amend Chapter 41, title 38, United States Code, Section 2003A, to eliminate the requirement that no more than three-fourth of DVOP staff be stationed in local Employment Service offices, and substitute language to the effect that Disabled Veterans Outreach Service staff may be outstationed by State Employment Security Agencies on the basis of need established by the State Director for Veterans Employment and Training Service, U.S. Department of Labor.

RESOLUTION NO: 432

COMMISSION : Economics

SUBJECT : VETERANS EMPLOYMENT TRAINING PROGRAMS FOR ALL VETERANS

WHEREAS, Veterans of all eras are experiencing unemployment and underemployment problems of significiant proportions nationwide; and

WHEREAS, Congress, in enacting the Job Training Partnership Act, at Title IV-C provides for a National Veterans Program; and

WHEREAS, Older generations of veterans are also in need of employment/training programs that address their economic needs and reflect their years of economic contributions and talents; now therefore be it

RESOLVED, By The American Legion in National Convention assembled in Salt Lake City, Utah, September 3,4,5, 1984, that The American Legion urge Congress to provide for veterans of all eras who are in need of employment/training assistance in all proposed federally funded training programs.

RESOLUTION NO: 592

COMMISSION : Economics

SUBJECT : REQUIRE THE DEPARTMENT OF LABOR TO MAINTAIN VETERANS PREFERENCE IN THE "VALIDITY GENERALIZATION" SYSTEM FOR JOB REFERRAL PURPOSES

WHEREAS, Section 2002 of title 38, United States Code, and accompanying regulations, provide that eligible veterans be referred to jobs on a priority basis through local Job Service offices; and

WHEREAS, The Department of Labor has funded and provided operating guidelines for placement procedures to a number of state Job Service offices under a procedure known as the "Validity Generalization" system; and

WHEREAS, This system includes occupational testing wherein numerical scores are used to determine priority applicant referral without the required regard to veterans status; and

WHEREAS, Such numerical ranking, without the required veterans preference, is contrary to established law and regulation; now therefore be it

RESOLVED, By The American Legion in National Convention assembled in Salt Lake City, Utah, September 3,4,5, 1984, that the American Legion call upon the Department of Labor to amend the "Validity Generalization" system, with respect to occupational testing, to maintain veterans preference, pursuant to law and regulation, for all Job Service applicants.

CENTERS FOR DISEASE CONTROL

STATEMENT OF JAMES BROSSEAU, M.D., INTERNAL MEDICINE, GRAND FORKS, ND

Senator PROXMIRE. Our next witness is James Brosseau, a doctor of internal medicine from Grand Forks, ND. Dr. Brosseau, we are happy to have you here. Why don't you come up to the table.

Senator BURDICK. Mr. Chairman, I would like to extend a special welcome to Dr. Brosseau, who comes from my home State. I am looking forward to his testimony.

Senator PROXMIRE. You have two good friends sitting on this committee, and one is sitting right next to me. He and I have been together as colleagues for 26 years in the Senate.

Senator BURDICK. Twenty-seven.

Senator PROXMIRE. Go right ahead

Dr. BROSSEAU. Thank you very much.

I am a practicing physician in Grand Forks, ND. I am an internist, and I am interested in diabetes, and I am here to testify on behalf of the Centers for Disease Control and their State diabetes control projects.

I see diabetes in my practice every day. Recently, we had a 10-month old child diagnosed with diabetes, and an 89-year old man who had to start insulin injection. It is really a major public health problem in this country. As you may know, 5 percent of our population have diabetes at this time, and one-half of those people don't even know that they have it. It is yet undiagnosed. Among children, about 1 out of every 500 has diabetes. It may not sound like a lot, but when a child develops diabetes, the whole family is affected by it. It is not like other childhood illnesses that go away after a few days, the kids have to live with it for the rest of their lives.

We have a large Indian population in North Dakota, and diabetes is a special problem for them because 1 out of every 4 Indian persons in our State has diabetes. In some States, such as in Arizona, 1 out of every 2 Indian adults has diabetes. So it is really a major problem.

We conducted a study recently in North Dakota, and we found that 1 out of every 7, by the time they reach old age, has diabetes, and the diabetes is just increasing in prevalence throughout the years. This is especially true among Indians where 50 years ago, they didn't have any at all.

You would think that we have a standardized approach to providing services to people with diabetes, but in reality we really don't. There are still a lot of patients who are not aware of the services they need. There are a lot of doctors who are not aware of the services that they should be providing to their patients with diabetes.

The CDC got involved in this just a few years ago through funding State diabetes control projects. There are 20 States that have this project, and in just that short period of time it has made significant contributions at the State level. At the State level, for example, they have shown that complications can be prevented, that hospitalizations can be reduced, and that outpatient visits can be reduced, and dramatically in some cases, and the savings from that is very substantial, as I am sure you can guess.

The CDC is so good at everything they do, that we really need their continued involvement in that, and I would like to see them involved more in other States with diabetes control projects, and also more involved with other chronic illnesses. For example, arthritis is a good example of where they might get involved.

At the present time, it appears that the administration would like the State health departments to assume control of State diabetes control demonstration projects. If we lose the continued support of the CDC in the State control projects, I think a lot of the progress that we have made will be in danger of being lost.

North Dakota doesn't even have a State project, but we need one and we should have one. I think that every State should have one. I have come here to say that I hope we can have continued support of the CDC diabetes control projects in the future.

Thank you.

PREPARED STATEMENT

Senator Proxmire. Thank you, Doctor, for a very fine presentation. Your submitted statement will be inserted in the record.

[The statement follows:]

Statement of Dr. James D. Brosseau

I am a practicing physician, an internist, in Grand Forks, ND. I have a special interest in diabetes because so many of my patients have it. Right now, at least 5 percent of North Dakotans have diabetes, and one-half of them don't even know it yet! The risk of contracting diabetes increases as you get older, so that by the time of death, 14 percent of North Dakotans, that is 1 out of every 7, have been diagnosed has diabetes. While most diabetics are adults, diabetes is also one of the most common chronic diseases of children, and when diabetes strikes a child, every one in that child's family is directly affected by it too.

North Dakota has a large population of American Indians. Diabetes has become an especially important problem for them. On the Fort Berthold Reservation in western North Dakota today, 1 out of every 4 full-blooded adult Indians has diabetes melliltus. Incredibly, some tribes in America have rates of diabetes that are even twice that high!

Diabetes can strike anyone, at any time. In my practice back home, I have a young woman who was diagnosed a diabetic before she was 1 year old. I have another patient who, after 88 years of robust health, suddenly became profoundly diabetic and had to learn how to give himself shots of insulin every day. The prevalence of diabetes has been steadily increasing over the past several years, so that today there is hardly anyone who does not have a family member or at least a close friend who is afflicted with it. It is no exaggeration to say that there is an epidemic of diabetes silently sweeping through the United States, an epidemic that we were not fully prepared for.

In the few short years they have been in existence, the diabetes control projects [DCP's] have made great contributions to our understanding of diabetes. They have, first of all, demonstrated the extent of the suffering and death caused by diabetes, and given us reasons why this occurs. They have then shown that appropriate intervention, primarily through education of patients and their physicians, can lead to improved patient care, as well as drastic reductions in health expenditures. From a practical standpoint, these projects have led to the publication of "A Guide for Primary Care Practitioners" on the prevention and treatment of the complications of diabetes. This book sets standards of care which, if heeded, could save perhaps hundreds of millions of dollars in health care costs. All of these things and many more have happened because of the involvement of the Centers for Disease Control in the State projects. The CDC is one of the greatest institutions this country has ever produced. They do things so well and make it all look so easy.

My State of North Dakota does not even have a DCP, and yet we have gained so much from the experiences of the States which do have them. North Dakota should have a diabetes control project, and so should every State in the Union. The relatively small amount of money invested in these projects is returned many times over in the dividends they produce.

Right now, most State health departments could not manage these projects alone. They need the continued support of the CDC. Without it, I am afraid that our assault on diabetes will falter, and we will be in danger of losing the battle with diabetes which is now going so well.

Senator BURDICK. I have been talking to a group interested in the same thing, and they told me that there is hope on the horizon through implants.

Dr. BROSSEAU. The impact is one of the many advances that are being made in diabetes research today, yes.

Senator BURDICK. They were glowing with optimism about the chances in that as an answer.

Dr. BROSSEAU. The development of human insulin resulted in the synthetic production of insulin, which is going to be available. This is just an example of many, many things that are happening in diabetic research.

Senator BURDICK. These are all the reasons, plus others, why we want this to continue.

Dr. BROSSEAU. Yes.

Senator PROXMIRE. Thank you very much.

STATEMENT OF LYMAN J. OLSEN, M.D., M.P.H., DIRECTOR, DELAWARE DIVISION, HEALTH, ASSOCIATION OF STATE AND TERRITORIAL HEALTH OFFICERS

Senator PROXMIRE. Our next witness is Dr. Lyman Olsen, director, Delaware Division, Health, Association of State and Territorial Health Officials.

Dr. Olsen, it is nice to have you here. Go right ahead, sir. I think you understand how the lights operate.

Dr. OLSEN. Mr. Chairman, and members of the committee: My name is Lyman Olsen. I am a physician and director of the division of public health in the State of Delaware.

I am speaking to you today as a past president and representative of the Association of State and Territorial Health Officials, a national organization representing 57 directors of health throughout the Nation.

I am here today because the members of my organization are deeply concerned about the proposed funding of the national health budget.

We, like all citizens are concerned about the Federal deficit and the need for corrective steps to control this problem. We wish to make sure that the steps taken, while appearing to be beneficial, are not in the long term destructive.

The thrust of public health departments is prevention; prevention of disease, morbidity, and excess mortality by applying known successful interventions. The prevention of disease and disability makes more sense, both fiscally and morally than the treatment of disease and illness.

The members of this organization are certainly not opposed to maintaining our national security. I cannot refrain, however, from pointing out that human resources of this Nation are also part of the national security.

An unhealthy population is not only unproductive, but a drain on our economic resources. My experiences overseas have pointed that out very clearly.

I am old enough to remember the numbers of my contemporaries rejected for the armed services in World War II due to health problems and physical defects that are completely preventable today if recognized early.

Before discussing individual areas of concern, I would like to mention one additional area of general concern.

Level funding appears on the surface to be a maintenance of effort. That is not so. Because of inflationary pressures, higher in the health field than the economy as a whole, some ground is lost each year. An additional area is the impact on the dollars available for actual service delivery.

One does not stand still. We move ahead or backward. Unless the States pick up the differences, services must necessarily be reduced. This does not begin to address the population increases or the new problems which seem to appear with great regularity or new and increasingly expensive technologies.

To mention just a few of these, one can find the rapidly increasing problem with AIDS, HTLV-III testing, alternate testing sights, counseling services, inflationary costs of DPT and other vaccines, the new H influenza vaccine, not to mention the chemical products and substances identified as toxic.

Yet, the regular public health programs have to maintain constant vigilance against all enemies as the salmonella outbreak in the Midwest has so clearly shown.

While it may appear that some States are in a financial position to assume major burdens of cost shifting for health programs, this may be more apparent than real. Not too long ago, States faced major deficits because of unemployment problems. Severe cutbacks in State programs were made and salary adjustments delayed. Now that the economy has improved somewhat, long delayed salary adjustments must be made and building repairs, replacement of obsolete and worn out equipment must be undertaken. Legislators will look very carefully at assuming more of the costs of what began as a partnership for health.

The States have accepted and endorsed the 1990 objectives for the Nation in promoting health and preventing disease but this should remain a joint State and Federal partnership.

Beginning to become more specific, let me address the following:

In regard to maternal and child health, a nation may be judged by how it treats its children. Our record is not one to be terribly proud of. My State is currently spending MCH block grant funds to 125 percent of our funding level. This is possible because of past surpluses which are being rolled over.

This is the last year that can be done for the surplus funds are now committed. Fiscal year 1987 will see major cuts in MCH services unless the State can be induced to pick up the difference. Other States are in that situation as well, or have already expended any past rollover funds.

The MCH block grant should be increased if possible, even for inflationary costs if not otherwise possible. Certainly level funding is an absolute minimum required.

The preventive health services block grant is now at a minimum level if one considers the demands placed on those funds and the types of problems I mentioned earlier.

We note that reductions are indicated for infectious diseases and for chronic and environmental disease prevention.

In many areas, chlamydial infection is equal to or surpassing gonorrhea as the most common sexually transmitted disease. The budgets of laboratories and disease prevention units are unable to cope with the demands of these new infections.

The AIDS alternate laboratory testing program is a 90-day program only, but the need will continue for that service.

An aging population is subject to more and more chronic disease and disability. Many end up in institutions because of the failure to deal with chronic disease effectively, yet this program receives scant attention.

Environmental contaminants increase daily, but our knowledge and capability to deal with the related health aspects does not keep pace.

Family planning must remain separately funded under title X. Inclusion of this program in the primary care block grant would be extremely detrimental to this program.

The WIC Program is one of the most useful programs in public health, not only in early identification of problem families and treatable conditions, but therapeutic as well.

The Centers for Disease Control remains the strongest ally of State and local public health agencies and certainly the closest and most responsive link to the Federal Government of any Federal agency. The research, technical support, educational efforts are a major factor in maintaining strong public health leadership and response capability to major problems.

ASTHO urges strong consideration be given to increasing preventive health efforts because of the long-term cost/benefit ratios of those programs.

As the population ages, the need to maintain that population in the most healthy State possible is mandatory to reduce the prohibitive costs of medical treatment.

If increases are not possible due to the budget reduction efforts, certainly health programs should be maintained at no less than present levels.

Thank you.

Senator PROXMIRE. Thank you, Dr. Olsen. You are absolutely right, an unhealthy population is a drain on the economy. You are doing a fine job.

STATEMENT OF LARRY C. DEEB, M.D., ON BEHALF OF THE FLORIDA DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES, AND THE FLORIDA DIABETES ADVISORY COUNCIL

Senator PROXMIRE. Our next witness is Dr. Larry C. Deeb, representing the Florida Department of Health and Rehabilitative Services, and the Florida Diabetes Advisory Council.

Dr. DEEB. I have submitted my written testimony, and I would like to highlight a few points.

Since 1977 the Centers for Disease Control have been involved in the fight to control diabetes, the No. 3 killer in the United States.

Dr. Olsen also spoke somewhat of the problem of diabetes and I think that the problem is clear.

The administration has proposed a $5 million increase in the CDC funding, and that is the sum total of the field activities. What has not been pointed out is the dramatic success of the CDC on diabetes.

The Outpatient Education Program reduced hospitalizations from 43 to 58 percent, that is an amazing figure. There were 2 million hospitalizations last year from diabetes, and 1.1 million of them were of people over 65, the people that Medicare pays for. Interestingly, those hospitalizations, now that we have prospective payment, which hasn't affected pediatricians yet, but I expect will, the cost for the hospitalization, you pay so much for each hospitalization, and that is over $3 billion.

I can't expect that 20 State controlled programs, in a demonstration mode, that document that kind of a reduction, are going to do the same if you allow them to go nationwide. I can't promise that. But the program is so successful. You realize that the 1,600 admissions, that is all the CDC diabetes program has.

If indeed this program is continued, and if, indeed, each 1 percent in reduction nationwide of hospitalization of the Medicare population, that is five or six times the CDC budget. So taking 1, 2, 10, not 40 percent, that is the prospect.

CDC is successful. Their programs are successful. This is just one of them, and I think we would be wise to retain it.

Thank you.

PREPARED STATEMENT

Senator PROXMIRE. Thank you very, very much. Too bad you were not able to call those diabetes statistics to the attention of the Office of Management and Budget.

Dr. DEEB. We tried.

[The statement follows:]

STATEMENT OF DR. LARRY D. DEEB

Since 1977 the Centers for Disease Control(CDC) have been involved in the fight to control diabetes, the number three killer in the United States. CDC has participated in the development of national consensus on diagnosis and treatment, most importantly prevention and treatment of complications of diabetes including the 5800 new cases of blindness and the 40,000 amputations which occur annually. In the hope of avoiding this needless and costly suffering CDC has also participated in the development of national standards for diabetes patient education that is so critical to prevention and early treatment.

In 1977 the consensus described above did not exist; today it does largely because of the CDC efforts. In addition, and perhaps more importantly, CDC has developed mechanisms which have allowed for rapidly translating new advances, including CDC project findings, into community practice. Today a cadre of public health officials, experienced in diabetes control, along with a diabetes community which has worked in partnership within the CDC program models, is ready to promulgate the developed consensus to a broader application in patient care.

The infrastructure for diabetes control has been created. The spectacular cooperation CDC has elicited from the larger diabetes community speaks most highly for the programs CDC and the diabetes community have created together. To date the CDC audience has been the 20 states funded under the cooperative agreements and two or three states not funded with federal dollars but which had extant state programs. One of these states is Florida. In addition, to date, the program has operated within segments of the 20 funded states. The limited range of programming was necessary during the study and demonstration phase. The program is ready to extend its strategies to larger targets, and to develop more specific strategies for the disease's various complications. The CDC diabetes program is literally ready to become a major national disease control program, and take its place along side the other major efforts of the CDC.

The program, just at the time when it has a base from which it can develop a comprehensive program to control diabetes faces virtual destruction in the field operations which are most crucial for effective outreach to the community.

This administration has argued that the CDC program was designed as a demonstration, one which would serve to prove diabetes control could be successfully implemented, and then the program was to be turned over to the state health agencies for long term implementation. This argument might be valid if this program had enjoyed only minimal success, but I would champion the degree of success of this program. That success, combined with the mandated federal investment in diabetes, makes its continuation mandatory.

Based on the following information, the federal government cannot chance a loss of this program (an outcome which I predict would surely happen if the states were expected to fund the diabetes control efforts alone) at a time when reductions in federal expenditures are sought everywhere.

Outcomes of ambulatory diabetes patient education programs funded by the CDC project states show dramatic reductions in hospitalizations; 52 % in Maine, 43 % in Michigan, 58 % in Rhode Island , and 57% in Washington. Education programs for health care professionals in Colorado were followed by reductions in admissions to acute hospital care for nursing home residents with diabetes by 28 %.

The degree of reduction in hospital admissions prompted the private insurance carrier, Blue Cross of Maine to declare the demonstrated outpatient education program a standard policy benefit. So, while the private sector acknowledges the cost benefits of such a program, the present posture of this administration makes it likely that many federal insurance recipients will never enjoy such a benefit.

To fully understand the significance of the above data some factual perspective is necessary. In 1980, the last year for which complete statistics are available, there were 1,114,000 hospital admissions for persons over 65 who had a diagnosis of diabetes. The data are not available for the present, but, given the increase in the population, the numbers are not smaller. Nearly half of all hospital admissions for diabetes are in the over 65 age group. This is the Federal Government's responsibility. Medicare is the primary insurance source for the group over 65. Today, because of the prospective pricing policy of Medicare, the exact costs for each admission can be calculated, and is $3000. per admission for the diagnosis diabetes. This is over $3.3 Billion for hospital costs alone. This does not include physicians' charges, outpatient costs, supplies, drugs, etc. All of these costs, too, are borne by the Federal government.

Furthermore, the total CDC field budget of $5 million, those monies now recommended for elimination, would pay for only 1666 diabetes hospital admissions for the Medicare populat This amounts to 0.14% of the direct hospital costs now incurred by Medicare.

Applying the above information, I therefore return then to the contention that the Federal Government cannot afford to discontinue the CDC program. There is no way to save money here. Each one per cent reduction in hospitalizations for the above 65 age group will save the Federal Government over $33 million, and eliminate over 11,400 admissions. Each one per cent reduction in hospitalizations will save over 6.5 times the total CDC field budget, and the potential for these reductions is a demonstrated fact.

The demonstrations cited above showed a 43-58 % reduction in hospitalizations via patient education programs in the outpatient setting. Even in the nursing home setting, one which contains even older and sicker persons with diabetes, a 28% reduction in hospital admissions was achieved through education. One might rightfully argue that the degree of reduction in a community-wide or state-wide program as seen in a smaller demonstration could not be replicated. But the demonstrated level of reduction is so great, that I would argue that even a reduction of only 10% of that seen in the demonstrations, or a 4-5% overall reduction, one which could save well over $150 Million a year to the federal government, would be more than worth the investment.

Again, I would reiterate, the diabetes control program has demonstrated a degree of success that makes its continuation, not as a series of discrete demonstration projects, but as a national program, mandatory.

There is now so much more that needs to be achieved.

The program is just beginning to develop specific strategies against the costly complications of diabetes, blindness, the endpoint of retinopathy has been chosen as the first target. With continued funding the CDC will begin specific model interventions to evaluate the best intervention for retinopathy, while at the same time institutionalizing the effective strategies learned and described above.

The success of the CDC diabetes program must go forward; we, those of us involved in the disease itself, as professionals and as persons with diabetes, hope we can make the need and the opportunity clear. If this moment is lost and the cadre of trained individuals dispursed, it may never be reclaimed.

DOCUMENTED
EFFECT OF CENTERS FOR DISEASE CONTROL
DIABETES OUTPATIENT EDUCATION PROGRAMS
|
43-58 PER CENT REDUCTION IN HOSPITAL ADMISSIONS

HOSPITALIZATIONS
OF
PERSONS OVER 65
WITH
DIABETES
|
1,114,000
|
COST PER HOSPITALIZATION
TO MEDICARE
(DRG) DIABETES
|
$3000.00
|
TOTAL DIRECT HOSPITAL COST TO
MEDICARE
$3.342 BILLION

TOTAL CDC DIABETES FIELD FUNDING
|
$5 MILLION
|
TOTAL HOSPITALIZATIONS REPRESENTED BY CDC FUNDING
$5 MILLION / $3000 PER ADMISSION = 1666 ADMISSIONS
OR
0.14 PER CENT OF THE TOTAL MEDICARE HOSPITAL COST

EFFECT OF EACH ONE PER CENT REDUCTION IN
HOSPITALIZATIONS AS COSTS TO MEDICARE
$33.42 MILLION
OR
6.5 TIMES TOTAL CDC DIABETES FIELD BUDGET

STATEMENT OF JEFFREY LEVI, DIRECTOR, GOVERNMENTAL AND POLITICAL AFFAIRS, NATIONAL GAY TASK FORCE

Senator PROXMIRE. Our next Witness is Jeffrey Levi, director of governmental and political affairs for the National Gay Task Force.

Mr. LEVI. Mr. Chairman, I appreciate this opportunity to testify on behalf of the National Gay Task Force regarding the fiscal year 1986 budget for the Public Health Service's AIDS-related activities. Your support for funding of AIDS research has helped to make possible the considerable progress we have made in understanding AIDS. Unfortunately, we have a long way to go before this disease is conquered.

In the year since we last testified, the number of persons with AIDS as reported by the Centers for Disease Control has more than doubled, from 3,900 to 9,700 as of April 15. The tradegy of AIDS continues and grows. Again, according to the CDC's estimates the number of persons infected by HTLV-III, the virus associated with AIDS, is between 500,000 and 1 million. They also expect that the number of cases will double in the next year to nearly 20,000. This represents a crisis that merits more than the current services level of funding requested by the administration, a request that in real terms reduces PHS spending on AIDS from $96.1 million in fiscal year 1985 to $85.5 million in fiscal year 1986. This is particularly bad since agencies within PHS have already found the current $96.1 million to be insufficient and have had to reprogram money to meet their responsibilities regarding AIDS.

As the research into the cause and cure for AIDS continues nothing could be more important to the Public Health Service's response than the level of education and prevention undertaken to slow the spread of the disease. We have only recently become fully aware of the extent of the threat posed by this disease.

Absent a vaccine, absent a cure or effective treatment for AIDS, we must undertake a major national prevention and education program. We must do all we can to save lives and also in the process reduce the economic cost of this disease on the budgets of all levels of government.

It is impossible in these times not to recognize the fiscal constraints facing the Federal Government. However, every dollar we do not spend on prevention and education will be spent several times over on health care costs alone.

The CDC presented a paper in Atlanta 2 weeks ago that estimated the average cost per patient is $114,000.

The CDC has been given primary responsibility for education and prevention programs. These are woefully underfunded and have often been redirected to projects that are only indirectly related to education. The CDC's fiscal year 1985 education budget totals $4,139,600, but $2.5 million out of that has been diverted to be spent on information and technical assistance relating to the HTLV-III antibody test.

While it is important to make the blood supply safer, these do not represent education programs about risk reduction.

We ask this committee to add $2.5 million to the fiscal year 1986 CDC appropriation specifically for risk education and information programs, perhaps along the lines originally proposed by former Assistant Secretary for Health, Dr. Edward N. Brandt, by expanding cooperative agreements with State and local health departments for risk reduction and information programs.

This is a very small amount of money, given the need. However, we are so lacking a comprehensive national AIDS education and prevention plan. Therefore, we urge this committee to direct the Public Health Service to develop such a comprehensive program within the first 3 months of fiscal year 1986 and return to Congress with requests for additional funds. That program should target all segments of the American public, since we are all at risk.

There are additional areas in need of increased funding. Both the CDC and the NIH have consistently had to reprogram money from other important research and prevention activities to find the additional funds needed for AIDS activities beyond what the administration had requested in its annual budget.

We ask that you restore NIAID the $4.8 million, and NCI the $5.5 million they have already reprogrammed in 1985. We also ask that you restore to CDC the $5.4 million reprogrammed to pay for alternative testing sites.

We urge that you assure the success of the HTLV–III antibody testing of the blood supply by continuing in fiscal year 1986 the funding for alternative testing sites.

These are very modest requests for a crisis that is threatening millions of lives. For some gay men in this country now, AIDS is as likely a cause of death as heart attack or cancer, the two leading causes of death in America. Our experience, though, however painful, is not unique. Every day individuals and families from other communities are learning the same lessons of fear and loss as we have.

The numbers—gay or straight—are growing by the hundreds every week. This is a national emergency. This is a crisis confronting all Americans. In the memory of the nearly 5,000 who have already died, in the hope of 5,000 people with AIDS now fighting for the lives, in the name of thousands of others who still may face this awful disease, we ask that you provide our Nation's scientists and educators with the money to prevent the further spread of AIDS.

Thank you, Mr. Chairman.

Senator PROXMIRE. Thank you, sir.

Your support for a better education program, as mentioned in your testimony, has been strongly echoed by the Office of Technology Assessment.

Mr. LEVI. I know.

Senator PROXMIRE. OTA says that a more comprehensive education program at the Federal level is a critical component in the battle against AIDS since prevention is not possible at the moment.

Mr. LEVI. At the moment, education is our only means of prevention.

Senator PROXMIRE. I have asked CDC why they are not doing a better job in educating the public regarding the disease. This was one question that we submitted to them at the hearings, but we have not heard from them as yet.

PREPARED STATEMENT

I am happy to get your very fine presentation, and we appreciate it. It will be placed in the record.

Mr. LEVI. We appreciate your support. Thank you.

[The statement follows:]

STATEMENT OF JEFFREY LEVI

Mr. Chairman, I appreciate this opportunity to testify on behalf of the National Gay Task Force regarding the fiscal year 1986 budget for the Public Health Service's AIDS-related activities. Your support for funding of AIDS research has helped to make possible the considerable progress we have made in understanding AIDS. Unfortunately, we have a long way to go before this disease is conquered.

In the year since we last testified, the number of persons with AIDS as reported by the Centers for Disease Control has more than doubled—from 3,899 to 9,608 as of April 15th. The tragedy of AIDS continues and grows. Again, according to the Centers for Disease Control,

- we can expect the number of cases to double in the next year to nearly 20,000;
- the number of persons infected by HTLV-III, the virus associated with AIDS, is between 500,000 and one million, with between 5 and 20 percent of those individuals going on to develop AIDS in the next five years;
- the number of persons infected is growing rapidly and infectivity is expanding beyond the initial groups considered to be at high risk for AIDS;
- the estimated cost of health care for the average AIDS patient is $114,000 for the duration of the illness, totalling $1,256,300,000 for the first 9,000 cases of AIDS;
- the estimated indirect cost of AIDS—in terms of lost income and lost productivity—is $4,382,200,000 for the first 9,000 cases.

These statistics make painfully clear the incredible price in lives and money that this disease is extracting from all Americans. It is a price that is increasing daily. It represents a crisis that merits more than the "current services" level of funding requested by the Administration, a request that in real terms reduces PHS spending on AIDS from $96.1 million in fiscal year 1985 to $85.5 million in fiscal year 1986.

Such a diminished response is inappropriate given the magnititude of this growing crisis. It is particularly inappropriate given that agencies within PHS have already found the current $96.1 million to be insufficient and have had to reprogram money from other programs to meet their responsibilities regarding AIDS.

# # # # #

As the research into the cause and cure for AIDS continues, nothing could be more important to the Public Health Service's response than the level of education and prevention undertaken to slow the spread of the disease. We have only recently become fully aware of the extent of the threat posed by this disease. Absent a vaccine, absent a cure or effective treatment for AIDS, we must undertake a major national prevention and education program. We must do all we can to save lives and also, in the process, reduce the economic cost of this disease on the budgets of all levels of government. It is impossible in these times not to recognize the fiscal constraints facing the federal government. However, every dollar we do not spend on prevention and education will be spent several times over on health care costs alone.

The need for a massive infusion of federal dollars for education is clear. Until now, local, community-based AIDS service organizations have borne the burden of risk reduction education with minimal government support and no federal dollars. Those programs have had a demonstrably positive effect—as measured by the reduced rate of sexually transmitted diseases. But these programs have reached only a small portion of those at risk to AIDS and they have generally been implemented only in the major cities. We must replicate the success of these programs throughout the country and reach out to all those at potential risk to AIDS.

The Centers for Disease Control has been given primary responsibility for education and prevention programs. These are woefully underfunded and have often been redirected to projects that are only indirectly related to education. The CDC's fiscal 1985 education program budget totals $4,139,600. However, more than half of that money--$2,585,650--is being spent on information and technical assistance relating to the HTLV-III antibody test. There is no doubt that the programs funded surrounding the antibody test--so important to making the nation's blood supply safer--are necessary. But there is also no doubt that these do not represent education programs about risk reduction.

Within existing funding, only $150,000 in fiscal 1984 and $250,000 in fiscal 1985 monies will be going to community-based public education efforts--efforts that have been proven to be effective in reducing the risk of transmitting HTLV-III.

We ask this committee to add $2.5 million dollars to the fiscal 1986 CDC appropriation specifically for risk reduction education/information programs, perhaps along the lines originally proposed by former Assistant Secretary for Health, Dr. Edward N. Brandt in May 1984, when he outlined a $2.5 million program for expanding cooperative agreements with state and local health departments for risk reduction/information programs. We would suggest a requirement that at least one-half of the funds be granted to community-based groups engaged in public education about AIDS.

This is a very small amount of money, given the need. However, we are still lacking a comprehensive national AIDS education and prevention plan. Therefore, we urge this committee to direct the Public Health Service to develop such a comprehensive program within the first three months of fiscal 1986 and return to Congress with requests for additional funding. That program should target all segments of the American public, since we are all at risk.

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There are additional areas in need of increased funding to improve the PHS effort against AIDS. Most of these relate to this Administration's "robbing-Peter-to-pay-Paul" method of budgeting. Both the CDC and NIH have consistently had to reprogram money from other important research or prevention activities to find the additional funds needed for AIDS activities beyond what the Administration had requested in its annual budget. Indeed, we may have reached the point where CDC and NIH officials are not telling their political superiors their true need for additional AIDS funding, for fear that they will be forced to reprogram even larger amounts, thus imperiling other important health care projects.

We ask that this committee provide supplemental funds for fiscal 1985 to make up for the reprogramming, and revise upwards the Administration's 1986 request to reflect continuation of these efforts. According to the Office of Technology Assessment (Review of the Public Health Service's Response to AIDS, February 1985), the National Institute of Allergy and Infectious Diseases has had to reprogram $4.8 million from research and clinical trials on other diseases to fund continuing work on AIDS carried over from fiscal year 1984. Similarly, the National Cancer Institute has had to reprogram $5.5 million.

Funding alone, however, will not resolve some of the problems confronting the scientific community. Personnel cutbacks have made it difficult for NIH to carry out the research that it has been assigned. For example, again according to OTA, "NCI is currently under a restriction to hire only one person for every two who leave the institute. NIAID foresees that it may have the same restriction."

The recently licensed HTLV-III antibody test for screening blood donations has resulted in the reprogramming of an additional $10.4 million to pay for the first 90 days of alternative testing sites. Five million dollars has been taken from the National Health Service Corps and the rest from a range of CDC programs—including AIDS epidemiology and surveillance, hepatitis B, and sexually transmitted diseases. This approach to budgeting is forcing the PHS to choose which victims of disease it will try to help.

Much of the CDC reprogramming is accomplished through adjusting the contract period of cooperative agreements or delaying purchases into the next fiscal year. But there has been no accompanying request from the Administration to adjust upward the fiscal 1986 budget request to assure continuation of these programs. Thus, we will probably see even more reprogramming in 1986. The adjustment of the AIDS surveillance and epidemiology contracts with state and local health departments is particularly distressing given the increasing number of cases projected. If anything, the PHS should be planning to expand those contracts. New funds to make up for this reprogramming is essential.

The alternative testing site program is critical to the success of the effort to render the nation's blood supply safer. Yet the Administration is providing the states with 90 days' start-up money with no provisions for continuation. The need will continue, if not at the same level, and the federal government--which has long held responsibility for keeping the blood supply safe—should continue to fund this program.

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In summary, we ask this committee to continue its support for adequate funding of the fight against AIDS. We urge that you initiate a major national AIDS education and prevention program through an initial increase of $2.5 million to the CDC and with a requirement that CDC return in short order with a comprehensive plan of attack. We ask that you restore to NIAID the $4.8 million and NCI the $5.5 million they have already reprogrammed in 1985 through supplemental funding in 1985 and continue that increase in 1986; we ask that you restore to CDC the reprogrammed $5.4 million to assure that contracts initiated in 1985 will indeed be completed—either through supplemental funds in 1985 or as additional funds in 1986. And we urge that you assure the success of the HTLV-III antibody testing of the blood supply by continuing in fiscal 1986 funding for alternative testing sites.

These are very modest—probably too modest--requests for a crisis that is threatening thousands of lives. For some gay men in this country now, AIDS is as likely a cause of death as heart attack or cancer—the two leading causes of death in America. There are few gay men or lesbians who have not been directly affected by the losses AIDS has extracted. It has certainly strengthened the gay/lesbian community in many ways, as adversity often does. We have, I think, provided a model for a community caring caring for its own. But the problem has become too large for us to handle alone.

Our experience, however painful, is not unique. Every day individuals and families from other communities are learning the same lessons of fear and loss as we have. The numbers—gay and straight—are growing by the hundreds every week. This is a national emergency—not a gay emergency or an IV drug user emergency or a hemophiliac emergency. This is a crisis confronting all Americans. In the memory of the nearly 5,000 who have already died, in the hope of the 5,000 people with AIDS now fighting for their lives, in the name of the thousands of others who still may face this awful disease, we ask that you provide our nation's scientists and educators with the money to prevent the further spread of AIDS.

STATEMENT OF LAURA N. BAILEY, MEMBER, MAINE DIABETES CONTROL PROJECT ADVISORY COMMITTEE

Senator PROXMIRE. Our next witness is Dr. Brian Biles, but he has not arrived yet. We are running a little ahead of schedule today. Consequently, I will call on Laura N. Bailey, a member of the advisory committee to the diabetes control project of the Maine Department of Human Services.

Ms. Bailey, we are happy to have you. Please go right ahead.

Mrs. BAILEY. Last year I was here requesting more funding for diabetes control project as only 20 States were being funded, and we wanted to expand to 5 more States for this most effective program. This year we are here pleading for our survival.

As you know, the administration wants to cut $5 of the $7 million appropriated, and this would be like cutting off our arms and legs because all the field staff would have to go in all those States.

I was a freshman in high school when I was diagnosed as having diabetes, and I have been on the needle now going on 35 years. I hope that you have my testimony and have read it. I thought maybe it would be effective if I show you what a person with diabetes has to carry in their pocketbook to keep off the various complications.

I call this my pancreas and in here I have two vials of insulin, slow acting and fast acting. I take three shots a day. Here are my syringes. It might seem kind of strange to have a pair of shoes in your pocketbook, but I have foot complications and I have to change my shoes every 4 hours. I have small vessel breakdown in the toes which is part of this problem.

I also have retina—a breakdown of small blood vessels in the eyes and cataracts, so this is my eye care package.

In order to tell where I am on my blood sugar level, I have this little computer blood machine. It is one of the greatest innovations since insulin because I put some blood on a tab and check it through, and I can find out exactly what my blood level is. This way I know if it is too low, and I am going to pass out from a reaction, or too high and I am going into a coma. It is really wonderful. In fact, it helps me to lead a more flexible life.

Testifying at lunchtime can be a little stressful and it causes to have to be careful how you juggle your insulin and your food intake, and the amount of exercise, to be sure you do stay at this healthy level. I have food in here also because, if we go too long, the one thing that we are not supposed to have otherwise, like candy or carbohydrates, is what has to bring up the blood sugar level, and you are not always near a good source of food.

Another thing that we have to wear around our neck sometimes is a medic-alert. This is to alert someone that you are a diabetic and must get special treatment and care. Many times it has happened that a person has passed out from diabetes complications, and they have been arrested and taken to jail as a drunk and disorderly, and not functioning well. This is another necessary thing.

It has been a dream of mine for some time that Maine become a safe place for diabetics to live. In fact, that our whole country could become a safe place for us to be. We do have a ways to go, but due to the diabetes control project, we are much closer to that now and far more people are having access to this vital information as to how you can live with this disease and lead a relatively normal life.

It is a very expensive disease to have, and everybody doesn't always have insurance. It is important to have understanding family and friends because this is an emotional disease also. We need to be close to good medical centers, and we need medical professionals who know what they are doing and understand about diabetes because it is a very complicated issue.

One of the things that the project has done is to educate and have seminars for physicians and nurses and dieticians. More and more people are learning about this disease and how to help other people with it.

My heart goes out to my brothers and sisters with this disease who are not as blessed as I have, and have not had an opportunity to be educated as to this disease. We can't stop now, we have too much more to do and a ways to go, but we have accomplished great things. I appreciate all of your support in the past, and look forward to your support in the future.

Senator PROXMIRE. Thank you, Mrs. Bailey, for a most impressive and moving presentation. I particularly appreciate the way you dramatized the problems of diabetes so well by bringing the physical evidence of what exactly you have to do to stay healthy. It is remarkable. I think very few of us who have been blessed by being able to escape diabetes understand this. I am sorry that we didn't have more Senators here to hear your very effective presentation.

Mrs. BAILEY. Tell them for me, please.

PREPARED STATEMENT

Senator PROXMIRE. You bet I will. We will insert your statement in the record.

[The statement follows:]

STATEMENT OF LAURA N. BAILEY

I am testifying today on behalf of the Centers for Disease Control Diabetes Control Program. My name is Laura Bailey. I have served on the Maine Diabetes Control Project Advisory Committee for several years - during some of those years I served as its Chairperson.

Last year I appeared before you asking for additional funding for the CDC Diabetes Control Program. Twenty states were being funded and we hoped to include five more in this most effective program.

This year I am pleading for our survival. I understand plans are to only fund the core staff at the Centers for Disease Control, Division of Diabetes Control. The CDC staff rely on field staff in the states to gather information from all diabetes research programs, teaching programs, American Diabetes Association actions, and from each of the 20 project states conducting diabetes control activities. In turn, CDC assimilates all this information and other pertinent resources and dispenses it back to their field staff who in turn get it to us - the people with diabetes; the consumers.

Dr. Deeb has told you of the cost effectiveness of this Program.

I would like to share with you for a few moments what it is like to be diabetic and what the information coming from this Program means in terms of human lives, the person with diabetes, their families, friends and general pubic.

Our family moved to Bangor, Maine in 1970 and on to the Augusta area in 1974. At the time of both moves I had difficulty finding doctors whom I felt knew enough about diabetes. It is scary to realize you know more about your disease than your physician. It is terrifying to be in a hospital where you realize the health care professionals need more knowledge and information.

I felt Maine was not a safe place for a person with diabetes to live. It has been a long time dream of mine that my home state of Vermont, my now home state Maine, and the whole country, will become "safe" places.

Thanks to the Diabetes Control Program this dream is in the process of coming true. Maine has become a much safer place for those of us with diabetes to live - but there is a long way to go!

This life-threatening, life-shortening, debilitating, insipid, insidious, and expensive disease had been largely ignored until the mid-70's. This is when Congress allocated funds towards the third leading killer by disease. Thus the Diabetes Control Program was born.

I was diagnosed as having diabetes at age 14 and am now entering my 35th year on the needle. Having diabetes meant my beta cells were malfunctioning. Beta cells occupy about 2% of the pancreas. Since a freshman in High School, my mind has had to act for my beta cells, and I have had to live in two worlds. I live "outside" with everyone else, but "inside" I am wondering: "Is my food intake in balance with my exercise and insulin intake?" When one or more get very far out of balance, one's blood sugar level can go like a roller coaster. Too far down and then too high up. The secret is to stay within 80 to 120. Kindly people say, "Poor you, three shots a day, I couldn't stand it." My answer is, "That's the easiest part." We also have to consider the stress factor. This can really raise havoc with otherwise good control. Testifying today during the lunch hour meant some juggling in terms of my shot and food routine. This is possible and fine when one knows how. There are many ways of coping to make life more "normal" - quote unquote!

When a person's blood sugar level is consistently "out of control" the complications can begin. Diabetes has been referred to as the disease of diseases because of the many associated complications and medical problems.

Diabetes is the leading cause of blindness. I have retinopathy which is the breakdown of small blood vessels in the eye. This can lead to blindness but thanks to laser treatment, this can be prolonged and often prevented.

Two summers ago I called my ophthalmologist to say my right eye was acting strangely. She saw me right away and removed a cataract the following day so she could start laser as soon as possible.

We are also prone to kidney problems. Of all the people on dialysis, 25% are diabetic.

High blood pressure and heart disease are common complications for us. Infections, foot problems, and amputations are other serious problems to which we are more prone.

Pregnancies are another serious challenge to the diabetic woman. I was fortunate to be living near a good medical center in Burlington, Vermont where I was hospitalized over 40 times during my two pregnancies 24 and 25 years ago. I was also fortunate to have as my physician, Dr. Ethan Sims, highly respected at home and abroad for his skill and knowledge in the area of diabetes and pregnancy. Neither my daughters - nor myself - would have survived without his skillful treatment and care. He and his wife are dear friends and have done much work for the cause of diabetes nationally. Dorothea Sims has diabetes and has edited the best book on this subject, Diabetes: Reach for Health and Freedom.

The Maine Diabetes Control Project is currently undertaking a program to counsel women with diabetes of childbearing age before conception regarding the benefits of tight glucose control both before and during pregnancy. There is evidence today that suggests such control will dramatically reduce the chances of a poor pregnancy outcome.

You are realizing there must be much to learn about the disease - and you are right! Not only for the victim but for their families, friends, and also the health care professionals. The funds allocated to the states from the Diabetes Control Program help bring high quality professional education and diabetes education programs to the diabetes community. These programs are so important to improving the health of diabetics and lowering health care costs.

I am fortunate to have a very supportive family. Early on when Jake, my husband, and I were dating I told him I had diabetes and false teeth. Later he told me he thought twice about asking me out again as he wondered what else might be wrong with or false about me! My husband has stood by me through many low and high sugar level swings. Emotions can ride the roller coaster right along with blood sugar levels, causing us to be difficult to live with and explaining the higher than normal divorce rates among diabetic marriages.

Both daughters have laughed with me and cried with me over the ups and downs of my life with this disease. Both say they are intellectually prepared to inherit it but say in their guts they are not ready. They recognize it is rough on the emotions and the psychological aspect of this disease can be debilitating. Our older daughter said she was in Junior High before she realized everyone's Mom was not diabetic. Our younger daughter wrote so many term papers on this disease, her teacher finally said, "I never dreamed there was so much to learn about diabetes, but next time, could you please choose another subject, Elizabeth?"

"You don't look diabetic" people often say to me. This is almost as funny as what someone told my blind friend who had diabetes. In making flight reservations, she asked if an attendant could help her make a change.

"Why?" the person asked.

"Because I'm blind."

"But you don't sound blind."

We may not look or sound different, but we are different.

I very seldom eat dessert but do have a passion for tapioca pudding so I indulge myself about four times a year. On one such occasion last winter, Jake and I were eating out after church. An older lady whom I know has diabetes came over and the old guilt feelings came upon me for eating "sweets".

"Laura, I want you to know I just finished taking t diabetes course at the Gardiner Hospital [a Maine DCP education program site]. I feel like I've been let out of prison. Among other things, they showed me how I could plan my diet to have birthday cake at all my grandchildrens' birthday parties."

"Wonderful! I'm so happy for you," I said. "Now, I know I don't have to explain this tapioca pudding to you."

"No, and I knew you'd be happy to know I have a new lease on life."

I was! The DCP programs concentrate on saying to people, "You can" rather than "You can not".

It is scary for me to look back and realized how many years I lived with this problem knowing as little as I did. It has been even scarier in more recent years to realize I know more about my disease than many doctors. Consequently, I just continue to shop further when this happens. Now it becomes even more scary to think that a program that so effectively addresses this issue is in danger.

Diabetes is an expensive disease to have. It is important to have insurance, supportive friends, good teaching programs and knowledgeable health care professionals available. My heart goes out to my brothers and sisters with this problem who are not as blessed as I. We can not stop this Program now for we are not even covering half the states yet and there is so much more to do. Please do not cut the field staffs as proposed. This would be like cutting off the Program's arms.

Thank you for all you have done thus far and for all you will do for us in the future.

STATEMENT OF HARRY TETER, JR., DIRECTOR, THE ATLANTIC EMERGENCY MEDICAL SERVICES COUNCIL

ACCOMPANIED BY WILLIAM CLARK, NATIONAL ASSOCIATION OF EMERGENCY MEDICAL SERVICES

Senator PROXMIRE. Our next witness is Harry Teter, the director of the Atlantic Emergency Medical Services Council.

Mr. TETER. Thank you, Senator. If I may, I would like to introduce William Clark who is representing the National Association of Emergency Medical Services.

We are very pleased to have the opportunity to be here, Senator, and to testify on behalf of the Centers for Disease Control's budget, and for the block grant for prevention.

I have submitted my testimony for the record, and I will not go into that at this time. I would just like to emphasize two or three points, and ask Bill to also address some of these from the national perspective.

We are addressing one of the biggest problems, I think, in the health business, the emergency care needed for victims of trauma who are in accidents, who have fallen ill. In fact, in the time that we will be talking to you today, Senator, two people will have died in this country, over 190 people will have been injured and need emergency medical assistance. That is how critical the problem is.

Senator PROXMIRE. That comparison greatly dramatizes it.

Mr. TETER. It does, Senator, because you realize that this is not just the next 10 minutes, but every 10 minutes that we live and breathe, some people are going to depend for some system to be there to save their lives. In certain places, that system will be there, and in other places, it will not be there.

It is unfortunate, in my opinion, that the categorical program in emergency medical services had to end several years ago when we were building a network of systems. It ended before that network was complete. The job has now been turned over to the Centers for Disease Control in the prevention block.

I would be less than candid if I didn't hope that there would be more attention at the Centers for Disease Control to this very big problem. I think more emphasis needs to be placed on this because it can affect everybody. You never know when you are going to be critically ill or injured, or when you are going to be struck by something, by a car. Half of these statistics, unfortunately, come from the highways, and we need care.

I would hope very much that the dollars that are available for emergency medical services to the CDC be flexible dollars. We must buy equipment. These systems depend on sophisticated equipment to save lives, and to have any arbitrary restrictions in that regard is very difficult for those who are out there providing the services.

Mr. Clark, as I said, represents the National Association of State EMS Directors, and he would like to make a few comments.

Mr. CLARK. I am also the State director for the State of Maryland for Emergency Medical Services, Senator.

We find the preventative services under the health care block grant very critical to the development of the systems in this Nation. We are not using the money for operations, but to help us properly configure the systems, because the systems themselves are operated by State and local funds, not on Federal dollars.

HHS played a critical role a decade ago in really bringing emergency medical services to the forefront, and started a great momentum in this Nation which has continued. But since they have dropped the categorical grants, and dealing with the CDC, there is some lack of direction in the utilization of these funds.

The State EMS directors wish them to continue. We would like to have a relationship with HHS and the national association because we, the State directors, in many cases are the ones who are setting the pace in the States in this country. Together, I think we can tremendously reduce the mortality and morbidity, and reduce health care costs through the configuration of our EMS systems, like taking people to the closest facility, and getting them the proper treatment and care, thus reducing long-term costs.

So indeed, the few dollars that flow to the States through these prevention block grants are very critical to us in properly configuring the systems. We hope that these will continue, and that we will have a strong relationship.

We will be handing in this testimony for your consideration.

Thank you.

Senator PROXMIRE. Thank you very much, Mr. Clark and Mr. Teter, for an excellent presentation. This is something that we haven't heard as much about. We are very happy to have your expert testimony. It will be very useful.

Mr. TETER. Thank you, Senator.

Mr. CLARK. Senator, can we submit the resolutions of the State EMS directors?

Senator PROXMIRE. Yes; please give copies to the clerk.

[The statement follows:]

STATEMENT OF HARRY TETER, JR.

Mr. Chairman and Members of the Committee, I am Harry Teter, Director of the Atlantic Emergency Medical Services Council. The Council's members are the directors of Emergency Medical Services (EMS) in the states of Pennsylvania, New Jersey, Maryland, Delaware, the District of Columbia, West Virginia and Virginia. On behalf of the Council I am pleased to have the opportunity to address the Committee and to urge full appropriations for the Preventive Health Care Block Grant for fiscal year 1986. Two important points need to be stressed in addition to this general recommendation:

- EMS should receive a guaranteed percentage of the block grant dollars, and
- There should be no restrictions on the use of the EMS dollars.

From 1973 to 1981 there was a categorical program for developing and implementing EMS systems across this Nation. The ultimate goal was to have a network of systems, each compatible with its neighbor, each meeting high standards of care, ultimately guarantying to a person who is traumatically injured the best care no matter where he is injured. For eight years EMS councils were set up across the nation on county levels to oversee the development, implementation and operation of these systems. The problem they were to address was staggering. Over 100,000 people were dying, over 2,000,000 were suffering disabling injuries, from trauma per year. The costs were likewise staggering. In 1973 it was a $50 billion problem; by 1981 it was an $80 billion problem. But where systems were in place these statistics were being reduced dramatically.

Systems are complex. Each requires several components to operate properly and to care for a victim of trauma from the time he is injured until he is in the proper medical facility. Those components are:

- Trained Emergency Medical Technicians and medical control of the care from the scene of the accident to the arrival at the care facility
- Properly equipped ambulances
- Communications equipment and dedicated air channels
- Medical facilities capable of instant response to the needs of the victim.

Each component plays a vital role in the care of the trauma victim. Each has subcomponents, each must link to one another. This latter point is most evident when a patient must be transferred to a neighboring system because the neighbor has the appropriate and needed medical facility for the patient which is not available in the home area. If, for instance, the patient requires the care of a major trauma center, they are only located in certain areas of the country and must be used on a regional, multi-state basis. If a person is severely injured in Harper's Ferry, WV, the nearest major trauma center would be in either Baltimore, Maryland, or the Washington, D.C. metropolitan area. He would undoubtedly have to be flown by helicopter to one of those facilities. That means that a West Virginia patient must begin in a West Virginia EMS system and go into a Maryland or District of Columbia metropolitan system for complete care. If this is not available the victim could well die. With systems, his chances of living are vastly improved. Many systems are working today doing what I just described, but many systems are not complete in this country. Those that are operational cannot be taken for granted. To have them and to maintain them takes money. User fees are never sufficient. Just as I could never afford to buy my own army, navy or air force, so I cannot buy my own EMS system. Those systems are as much a national responsibility as a military system. The challenges they face are as life-threatening as any military unit faces. Just as we have a national network of interstate highways to link cities for defense needs, so we meed a national network of EMS systems to save the lives of the trauma victims.

In 1981 we moved this effort from a categorical program to a block grant program. The dollars were reduced and the attack on the problem diminished. Today the Center for Disease Control administers the program. They have no figures on what dollars of the block grants to the states are going to EMS. I would hope that this could be corrected and that this information could be required and provided to us.

There is both good news and bad news concerning trauma and EMS in this country. According to the statistics compiled by the Study Center for Trauma and Emergency Medical Systems in Baltimore, Maryland, trauma incidents are increasing. D espite our preventive efforts, there are more cases of trauma. The good news is that because of our EMS systems more people are living who would have died before, more people are returning normal lives who would have been wards of their families or the state, dependent on others. EMS is doing its job but it needs help. The response to this must be on all levels of government - state and local resources are not adequate. If we are not to have a categorical - specific - program to address this, then at the least we should have a specific percentage of block grant dollars that at a minimum must be spent addressing EMS. There is precedent. Congress has set a certain percentage of the preventive block grant dollars for rape prevention. A percentage determined as a minimum for EMS will also signal a Federal initiative from Health, Human Services to address this problem again which is badly needed.

My second point is since these dollars are limited in amount there should be no arbitrary restrictions on them. The restriction on the purchase of equipment should be lifted from the law. EMS systems depend on equipment from the scene of the rescue through the ultimate rehabilitation of the patient. More than any other area of medical treatment, equipment is critical. The systems depend on the equipment they have; lives depend on this.

The requests we are making today will help in the job of providing EMS to all in this Nation. The dollars being requested, along with the dollars from other government and private sources, and the millions of volunteer hours of women and men who work in the systems rescuing trauma victims, will help save lives, one of which could be your neighbor's, a member of your family, or yours.

STATEMENT OF ROBERT C. SPEAR, PH.D., DIRECTOR, NORTHERN CALIFORNIA EDUCATIONAL RESOURCE CENTER, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF CALIFORNIA AT BERKELEY

Senator **Proxmire**. Our next witness is Robert Spear, director, Northern California Educational Resource Center, School of Public Health, University of California at Berkeley.

Mr. **Spear**. I, too, have submitted full comments, for the record.

I appreciate the opportunity to speak to the committee on behalf of academic programs in occupational health and safety. In preceding years, my colleagues from the University of Cincinnati, the University of Michigan, and Johns Hopkins have met with this committee for the same reason that I am here today; namely, to point out the crucial importance of continuing Federal support for professional education in occupational health and safety.

For a number of years, special training funds have been made available for these purposes through the National Institute for Occupational Safety and Health. In recognition of the acute manpower needs in various occupational safety and health specialties, Congress in 1976 authorized an expansion of training programs to include the creation of 20 multidisciplinary educational resource centers.

During the subsequent 4 years, funding was expanded for this purpose from $2.9 million to $12.9 million which allowed 12 of the 20 intended centers to be funded by 1980.

The number of professionals graduating from these programs grew in approximate proportion to the increase in funding, from 217 in 1976 to 747 in 1980.

An even greater increase was seen in the number of practicing professionals who attended continuing education courses at the various universities.

Despite this success, the ERC program has had a difficult time in maintaining its momentum and productivity since 1980 because of the drastic reduction of funding which began in 1981 and the uncertain outcome of this appropriations process in which we have been engaged every subsequent year.

The fact of the matter is that few of the programs that were initiated in the period around 1976 had had time to mature into anything near self-sufficiency by 1980 when the threat of withdrawal of Federal support became a real possibility.

Last year, my predecessor, Dr. Morton Corn, testified that the probable result of a cessation of Federal support for training in this area would be a further decrease in the number of graduates to about 25 percent of the total graduated in 1981 and that only about 20 graduate degree programs could be expected to remain viable in the long term.

However, there are two other dimensions of the problem that are of real concern as well. First, these centers are engaged in research and service, in addition to their training function. Service tends to have a large local component and the contraction of these university-based programs to a few centers around the country will have a very negative effect on the amount of usefulness of consultation we can provide State and local governments, the trade unions, and the small industry.

The congressional Office of Technology Assessment recently conducted a detailed examination of the role of educational resource centers as part of its study entitled "Preventing Illness and Injury in the Workplace." Its report strongly supports the graduate professional training being provided by the ERC's.

Option No. 12 of the OTA report reads: "The Congress could continue to fund training of occupational health and safety specialists, including the educational resource centers, through the NIOSH Training Grants Program." Mr. Chairman, this is precisely what we are urging here today.

Research as part of graduate professional training is also crucial. This year, we have spent considerable time and effort in planning, together with NIOSH, for a strengthening of the research component of the ERC's. We are trying valiantly to look beyond this annual fight for survival to build a stronger and more comprehensive program.

Recall that the intent of congressional appropriation for the ERC program in 1976 was to have 20 centers, each funded at approximately $1 million annually. NIOSH's peer review process has established that there are currently 14 university programs that meet minimum criteria to be educational resource centers. As also mentioned earlier, the ERC programs have proposed, and NIOSH has endorsed, the proposal that the scope of ERC activities be enlarged to specifically include research training.

PREPARED STATEMENT

Therefore, in terms both of the level of the original commitment and in view of the enlarged future mission of the ERC's, we urge the restoration of the originally intended funding level for the existing centers. Specifically, we urge the restoration of a funding level of $15 million for the NIOSH training program in fiscal year 1986.

Thank you.

[The statement follows:]

STATEMENT OF ROBERT C. SPEAR

I appreciate the opportunity to speak to this committee on behalf of academic programs in occupational health and safety. In preceding years my colleagues from the University of Cincinnati, the University of Michigan and Johns Hopkins have met with this committee for the same reason that I am here today, namely, to point out the crucial importance of continuing federal support for professional education in occupational health and safety. For a number of years federal training funds have been made available for these purposes through the National Institute for Occupational Safety and Health. In recognition of the acute manpower needs in the various occupational safety and health specialties, Congress, in 1976, authorized an expansion of training programs to include the creation of 20 multidisciplinary Educational Resource Centers (ERCs). During the subsequent four years, funding was expanded for this purpose from $2.9 million to $12.9 million which allowed 12 of the 20 intended centers to be funded by 1980. During this period, appropriate faculty were recruited, new curricula which stressed the multidisciplinary nature of occupational safety and health were established, and a concerted effort to attract outstanding undergraduate science and health students to the field was initiated at the universities. This effort resulted in the existence of over 100 different academic degree programs by 1980, offering degrees related to occupational medicine, industrial hygiene, occupational health nursing and occupational safety. These programs resided primarily in the 12 new Educational Resource Centers, with significant additional contributions of single discipline training projects operating in 29 other universities at the time. The number of professionals graduating from these programs grew in approximate proportion to the increase in funding, from 217 in 1976 to 747 in 1980. [See Exhibit 1].

An even greater increase was seen in the number of practicing professionals who attended continuing education courses at the various universities and at those provided by NIOSH. In 1977, approximately 1,600 individuals attended such courses. In 1980 this number had increased to almost 10,000 attendees [See Exhibit 2].

Despite this success, the ERC program has had a difficult time in maintaining its momentum and productivity since 1980 because of the drastic reduction of funding which began in 1981 and the uncertain outcome of this appropriations process in which we have been engaged every subsequent year. Indeed, the data show a very strong correlation between the number of graduates and the federal funding level in the preceding year. A similar correlation exists in the continuing education data [See Exhibits 1 and 2]. From the high of $12.9 million in 1980 the funding level was cut to $8.7 million in 1981, $5.8 million in 1982 and 1983 and then partially restored to $8.7 million in 1984 and 1985. One effect of this unstable situation has been to diminish the number of degree programs from about 100 in 1980 to about half that number today. Viable degree programs cannot be shut down or reopened on an annual basis.

The fact of the matter is that few of the programs that were initiated in the period around 1976 had had time to mature into anything near self-sufficiency by 1980 when the threat of withdrawal of federal support became a real possibility. Even the established programs have relied, and continue to rely heavily, on extramural sources of support for occupational medical residents who, unlike most other residents, do not contribute to clinical care income in the traditional teaching hospital situation because of their focus on disease prevention. Hence, federal support remains crucial to the provision of professional manpower needs in occupational health and safety.

Last year my predecessor, Dr. Morton Corn, testified that the probable result of a cessation of federal support for training in this area would be a further decrease of the number of graduates to abcut 25% of the total graduated in 1981 and that only about 20 graduate degree programs could be expected to remain viable in the long term. There are, no doubt, those who would be undisturbed should such academic Darwinism take its course. However, there are two other dimensions of the problem that make such an attitude very short sighted. First, these Centers are engaged in research and service in addition to their training function. Service tends to have a large local component and the contraction of these university-based programs to a few centers around the country will have a very negative effect on the amount and usefulness of consultation we can provide state and local government, the trade unions and small industry.

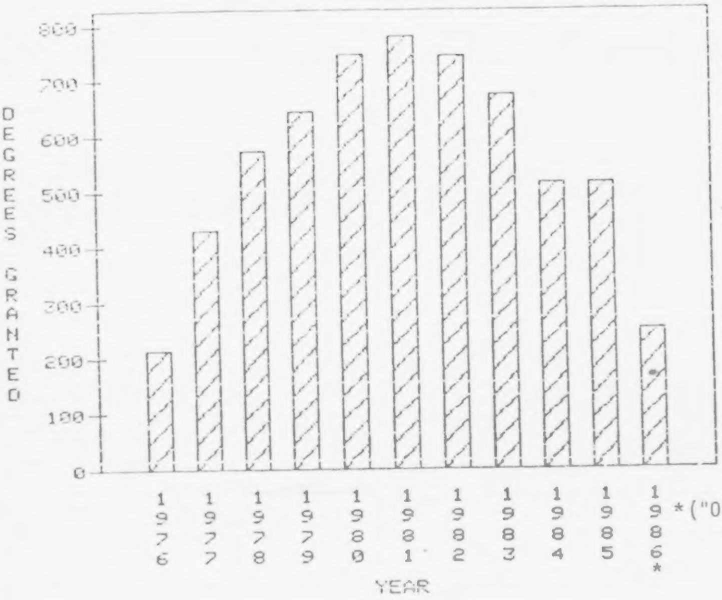
The Congressional Office of Technology Assessment recently conducted a detailed examination of the role of Educational Resource Centers as part of its study entitled "Preventing Illness and Injury in the Workplace." Its report strongly supports the graduate professional training being provided by the ERCs, despite the limited federal funds available in recent years. It points out that cutbacks in federal funding would likely reduce the number of trained professionals, as I have previously stated in my testimony. Option number twelve of the OTA report reads -- "Congress could continue to fund training of occupational health and safety specialists, including the Educational Resource Centers, through the NIOSH Training Grants Program." Mr. Chairman, this is precisely what we are urging here today.

Research as part of graduate professional training is also crucial. It is my personal opinion that part of the reason that these programs remain so dependent on federal support is that they have had insufficient time and resources to develop research programs commensurate with their training responsibilities. Within the universities competition for internal resources for graduate programs requires a strong research base. This year we have spent considerable time and effort in planning, together with NIOSH, for a strengthening of the research component of the ERCs. We are trying valiantly to look beyond this annual fight for survival to build stronger and more comprehensive programs for teaching, research and service in occupational health and safety. We must build a firm foundation within our institutions and also meet the considerable national needs both for professional manpower and for new ideas, techniques and procedures for the prevention of occupational disease and injury that is the nation's commitment to the American worker.

Finally, I would like to pick up on a theme raised briefly by Dr. Corn last year. The issue is simply this. In terms of cold cash, what is the federal investment in each of our graduates and how many cases of injury or disease might each graduate have to prevent in order for this cost to be repaid? On the average, the federal investment in each of our graduates is on the order of $10,000. Consider the example of our graduates in ergonomics who are concerned, among other issues, with the prevention of musculoskeletal injuries. The annual compensation cost for low back pain in this country is about $4 billion with a per case cost of $6,000. If, during an entire career, one of our ergonomists, by proper workplace design or worker education, prevents 2 workers from injuries leading to low back problems, he or she has easily paid for their education, in addition to the pain and suffering spared the two workers.

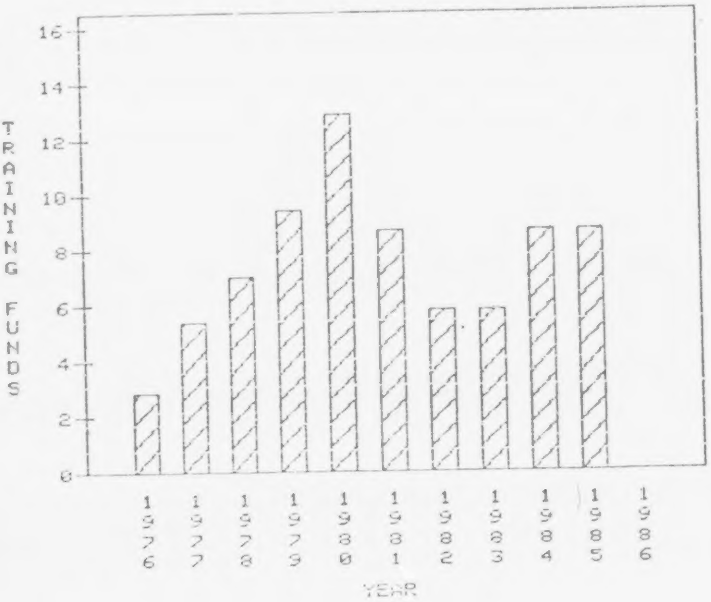
Recall that the intent of the Congressional appropriation for the ERC program in 1976 was to have 20 Centers, each funded at approximately $1 million annually. NIOSH's peer review process has established that there are currently 14 university programs that meet minimum criteria to be Educational Resource Centers. As also mentioned earlier the ERC programs have proposed, and NIOSH has endorsed, the proposal that the scope of ERC activities be enlarged to specifically include research training. Therefore, in terms both of the level of original commitment and in view of the enlarged future mission of the ERCs, we urge the resoration of the orignially intended funding level for the existing Centers. It must be recognized that the single discipline training projects in other universities are vital as they often produce special expertise needed in the field. These smaller programs have been equally impacted by the funding reductions over the last few years. Funding for these programs should be increased to $1 million per year. In summary, we urge you to consider the restoration of funding at a level of $15 million for the NIOSH training programs in the FY86 budget.

Exhibit 1



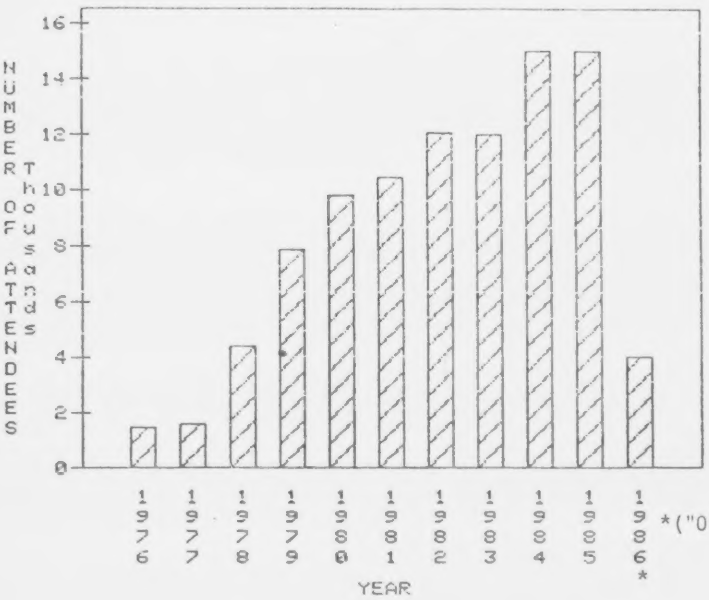
GRADUATE DEGREES GRANTED BY YEAR

*("0" Funding Estimate)



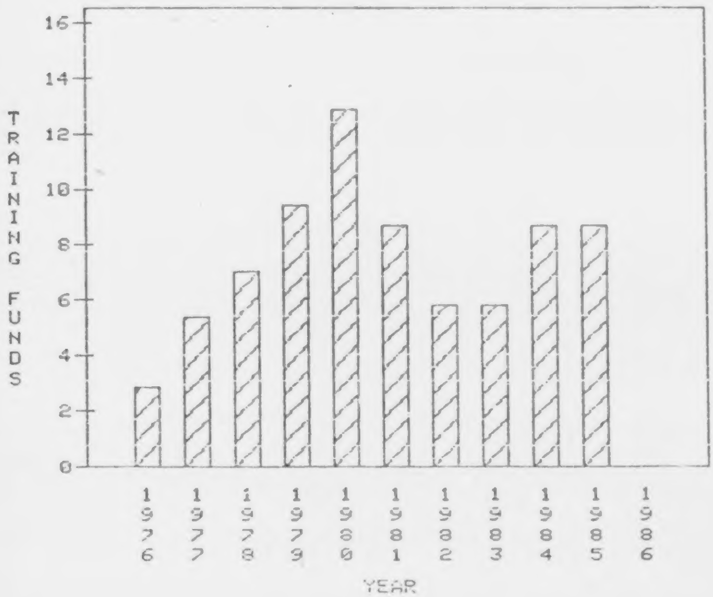
TRAINING FUNDS BY YEAR
MILLIONS OF DOLLARS

Exhibit 2



ATTENDEES IN CONTINUING EDUCATION COURSES BY YEAR
THOUSANDS

*("0" Funding Estimate)



TRAINING FUNDS BY YEAR
MILLIONS OF DOLLARS

Senator PROXMIRE. Thank you, sir. The statistics that you give are very impressive. You say that in 1977 about 1,600 individuals attended such courses, and in 1980 that number had increased to about 10,000.

Mr. SPEAR. Correct.

Senator PROXMIRE. What has happened since that time?

Mr. SPEAR. It has sort of oscillated up and down from there. At this point it is approximately 10,000 in number.

Senator PROXMIRE. Attendance is still that high in spite of the funding being low?

Mr. SPEAR. Yes; partially what you are funding would be a continuing education. There is a lot of self-support that goes on. There is a continuity, and a large self-support aspect to this.

Senator PROXMIRE. What do you foresee if the funding is reduced over the next 4 or 5 years?

Mr. SPEAR. I think the main thing that we will see is the diminution of the number of graduate professionals, hygienists, physicians, and nurses, by something like 25 percent.

Senator PROXMIRE. To 25 percent?

Mr. SPEAR. Yes; something like that. I think there are now something like 50 graduate professional training programs in the country and there will be a diminution to 25 which in a sense were there before this whole program began. So all the new expansion, the new people, the new initiatives is what is going to go.

Senator PROXMIRE. Thank you very much, Mr. Spear.

STATEMENT OF BRIAN BILES, M.D., MPH, DEPUTY SECRETARY, DEPARTMENT OF HEALTH AND MENTAL HYGIENE, STATE OF MARYLAND

ACCOMPANIED BY BARBARA LEVINE, AMERICAN PUBLIC HEALTH ASSOCIATION

Senator PROXMIRE. We will now hear from Dr. Brian Biles.

Mr. Biles, why don't you introduce your colleagues.

Dr. BILES. Thank you very much, Senator Proxmire. We appreciate your taking the time and investing the effort in these important health programs.

I am Brian Biles. I am the deputy secretary of the department of health and mental hygiene for the State of Maryland, and I am here today on behalf of the American Public Health Association, the oldest and largest public health society in the world.

Each year, the association does come before this subcommittee to discuss the Federal Government's commitment to preserving the public's health and meeting the Nation's special health needs. We believe that disease prevention and early treatment are effective and relatively inexpensive in the long run.

Particularly today, I am here to discuss what we feel are the bedrock or the foundation of the Public Health Program immunizations, venereal disease, AIDS, and the general Prevention Block Grant Program. We recognize that this is a limited number of programs, but we think they are the foundation.

We know that you are familiar with these programs, and we appreciate the work that you and your colleagues have done in supporting and maintaining these programs in the past years.

I will say that it is difficult to understand why measures that contribute to the public health in a cost-effective manner have been singled out year after year for reductions, or even elimination, by the current administration.

The administration's budget proposal for health and human services will unquestionably undermine the health of our citizens and of our health care system, with a tragic waste of lives and dollars.

The budget deficit is, of course, a problem. Everyone recognizes that, but the direction taken by the administration in the health care is counterproductive and fundamentally wrong.

Many of the programs which have been hardest hit by past cuts and programs proposed for cuts for next year demonstrably prevent disease and suffering and save more money than they cost in the long term.

APHA, again this year, in a time of austerity, is focusing its attention on immunizations, sexually transmitted diseases, AIDS, and the prevention block grant. Other equally deserving examples could be given but my time is limited.

With regard to the immunization program, the proposed budget argues that we have been 95 percent successful in our immunization efforts, but it would provide inadequate dollars to complete the job, especially in light of the 40-percent rise in the overall cost of vaccines in 1982. I think that if there is a point in the area of immunization, it is that over the past 2 years we have seen a 40-percent increase in the cost of vaccines, primarily related to problems with liability. We have seen a 30-percent increase in polio, and as much as a 2,000-percent increase in the cost of the DPT vaccine. When you are vaccinating millions of kids, these kinds of increases obviously have been occurring, it has reduced the number of people who can be vaccinated.

Second, we would urge additional dollars be placed into a vaccine stockpile. Last year, $4 million was appropriated for this purpose. A 6-month stockpile would cost on the order of $50 million. So additional funds placed in this area to provide a 6-month stockpile against manufacturers getting out of the field, and to provide a cushion for their withdrawal from the market we think is extremely important. We see real problems in this area of the DPT.

In the area of sexually transmitted diseases, the problem is not so much cost, but the problem of increased incidence. America faces an epidemic of sexually transmitted diseases. As many as four Americans between the age of 15 and 55 are affected. Over 1,000 babies will contract herpes at birth this year, and more babies will die in 1985 from venereal disease than the total number of deaths from toxic shock syndrome, Legionnaire's disease, and AIDS.

This is one of those prime problems that is always there, and it has gotten worse. But it doesn't get the attention sometimes.

There will be approximately 68,000 ectopic pregnancies in 1985, all of them fatal to the fetus, and 60 percent of these will be the direct result of venereal diseases. The point here is that we have more and more venereal disease now, and as we look 5 years ahead, or 10 years ahead, we are going to see a massive epidemic of ectopic pregnancies and infertility. This is again a problem today of disease not being treated, leading to problems as we look to the future.

In the face of these grim statistics, the President's fiscal year 1986 budget proposal provides no increase in funds at all for STD, with two particular problems, the new increase that we have heard so much about in the last year of chlamydia, and the ongoing problem, and the lack of any Federal response at all, with regard to herpes. Again, we think there is a problem in the area of sexually transmitted diseases, and we ought to increase funds, if possible, in this area.

The third area that we have heard so much about is AIDS' In 1983, Congress appropriated funds for research into the cause and cure of AIDS. The number of reported cases has increased dramatically since then. In December 1982, 788 cases were reported. Exactly 2 years later 7,699 cases were documented, a tenfold increase.

This year, the Reagan administration actually requested less money for AIDS programs than was appropriated last year. Additional funds are needed for research, epidemiology, and most of all public education.

We urge you, as you prepare the budget, to look in the area of AIDS, and provide additional funds to the CDC, to NIH, and to the Food and Drug Administration to respond to the very dramatic increase in AIDS.

The final point I would make is from the State point of view, and the prevention block grant. These funds are used for a variety of purposes. Many States are using those funds to cover the shortfall in the immunization and sexually transmitted diseases area. In Maryland, we have taken steps in preventable diseases such as hypertension, diabetes, and cancer. These are funds that are available to the States. They can make up shortfall in different areas. They can and are used for different purposes.

Because it is a block grant, sometimes it is hard to identify what it is for. I know sometimes that makes it an easy target for cut. We would simply say that the prevention area is really the bedrock of the Nation's health program. It is the foundation. These funds are extremely important.

In conclusion, I would say that we look to you and we urge you to reverse the administration's strategy, and even in this period of austerity, a small amount of highly targeted funds for immunization, sexually transmitted diseases, and AIDS, and prevention block grant. These programs are not luxuries that can be eliminated or reduced without major consequences. It is not even penny-wise, certainly pound foolish, to underfund the prevention and early treatment of infectious diseases and other threats to the strength and productivity of our greatest asset, the American people.

Thank you.

PREPARED STATEMENT

Senator Proxmire. Thank you very much, Dr. Biles. Your submitted statement will be placed in the record at this point.

[The statement follows:]

STATEMENT OF BRIAN BILES

Mr. Chairman and distinguished members of the Subcommittee, my name is Dr. Brian Biles. I am Deputy Secretary of the Department of Health and Mental Hygiene for the State of Maryland, and I am here today on behalf of the American Public Health Association, the oldest and largest public health society in the world.

Each year, the Association comes before this Subcommittee to discuss the federal government's commitment to preserving the public's health and meeting the nation's special health needs. We believe that disease prevention and early treatment are effective and relatively inexpensive in the long run, and we stress that investments in such programs as the prevention block grant, immunization, and the control of sexually transmitted diseases and AIDS substantially reduces the expenditures that otherwise have to be made down the road.

Mr. Chairman, we know that you are familiar with these programs. In the past, you and some of your other colleagues in the Senate have assured adequate funding for important public health initiatives. This year we look to you again to preserve and enhance the programs of the Public Health Service.

It is difficult for us to understand why measures that contribute to the public health in a cost-effective manner have been singled out year after year for reductions (or even elimination) by the current Administration. The Administration's budget proposal for health and human services will unquestionably undermine the health of our citizens and of our health care system, with a tragic waste of lives and dollars. The budget deficit must be eliminated, but the direction taken by the Administration in health care is counterproductive and fundamentally wrong. Those of us who are involved in the administration and delivery of health care and human services are troubled by the abandonment of important public health goals as a result of cuts already enacted and the "freeze" now being proposed.

Many of the programs which have been hardest hit by past cuts and programs proposed cuts for next year demonstrably prevent disease and suffering, and save more money than they cost in the long-term. APHA has chosen to focus its attention this year on immunization, sexually transmitted diseases, AIDS, and the prevention block grant. Other, equally deserving, examples, could be given, but my time is limited.

Immunization Program

The proposed budget argues that we have been 95% successful in our immunization efforts, but it would provide inadequate dollars to complete the job, especially in light of the 40% rise in the overall cost of vaccines since 1982. if the Administration's request for immunization funding is approved, 500,000 fewer children will be immunized this year than last and the risk of an outbreak of preventable childhood disease will be increased. We urge Congress to appropriate $59 million for this critically important activity.

There is presently a serious shortage of DTP vaccine and we may have future shortages of other critically important childhood vaccines. We therefore urge the Congress to fund a six month vaccine stockpile.

In FY83, it would have cost the federal government $21.5 million to establish a vaccine stockpile with a six month supply of vaccine. Today, due to increases in the cost of vaccines, the same size stockpile will cost close to $50 million. The cost of a six month supply of DTP vaccine alone has gone up over 2000% since 1982.

It is impossible to overstate the importance of immunizing our youngsters. Vaccines are among the safest, cheapest, and most effective ways to prevent infectious and communicable diseases. The introduction and widespread use of vaccines has resulted in dramatic declines in the incidence of childhood infectious diseases. Immunizing children today is far less expensive than paying to treat their illnesses later.

Sexually Transmitted Diseases

America faces an epidemic of sexually transmitted diseases; as many as one in four Americans between the ages of 15 to 55 are affected. Over 1,000 babies will contract herpes at birth this year. Half of them will die, and half of the survivors will have serious birth defects. More babies will die in 1985 from venereal disease than the total number of deaths from Toxic Shock Syndrome, Legionnaires Disease, and AIDS. There will be approximately 68,000 ectopic pregnancies in 1985, all of them fatal to the fetus. Sixty percent of these deaths will be the direct result of venereal diseases.

CDC currently provides active leadership and support for national efforts directed toward the prevention and control of syphilis and gonorrhea. But there are no federal dollars presently going to chlamydia control, despite the fact that this STD is three times as common as gonorrhea.

In the face of these grim statistics, the President's FY86 budget proposal provides no increase in funds for STD control. This means there will be no federal dollars going to chlamydia and herpes control. Given inflation and the dramatic spread of STDs, the Administration's funding proposals fall far short of what is needed. We urge you to provide funding for herpes and chlamydia control. In addition we ask that you instruct CDC not to use scarce STD resources for the AIDS program. Robbing Peter to pay Paul won't solve our present problems--it will just create new ones.

Acquired Immune Deficiency Syndrome

In 1983 Congress appropriated funds for research into the cause and cure of Acquired Immune Deficiency Syndrome. The number of reported cases has increased dramatically since then.

In December of 1982, 788 cases were reported. Exactly two years later 7,699 cases were documented--ten times as many. No one has yet recovered from AIDS, so the death toll has kept pace with the rising incidence of reported cases, nearly doubling.

This year, the Reagan Administration actually requested less money for AIDS programs than was appropriated last year. Additional funds are needed for research, epidemiology and most of all, public education. Just recently, the Administration requested permission to reprogram $10.5 million to assist states in setting up alternate testing sites. We were pleased to learn of the committment to alternate testing,but urge this committee to provide supplemental FY85 funds for this purpose.

The Prevention Block Grant

Congress established the Prevention Block Grant in 1982 to provide states with funds for hypertension and rodent control programs, emergency medical and home health services, and a variety of other essential public health activities. The block grant allows states some flexibility in deciding what other public health programs to fund. We have recently obtained data which indicate that prevention block grant funds are being used in many states to immunize children and control sexually transmitted diseases. Inadequate funding of the immunization and STD's categorical programs has necessitated the use of prevention block grant funds for these purposes. More and more, states are relying on these funds to pay for critically important public health programs that they would otherwise be unable to provide.

If the Administration has its way, the prevention block grant will be funded at FY84 levels. APHA believes that the proposed level of funding--a decrease after inflation--is totally unacceptable, and urges you to appropriate $98.5 million for this block grant.

We look to you to reverse the Administration's strategy; to save money and lives by adequately funding public health work. These programs are not luxuries that can be eliminated or reduced without major consequences. To the contrary, they fundamentally affect the health and welfare of present and future generations of Americans. It is not even penny wise--and it is certainly pound foolish--to underfund the prevention and early treatment of infectious diseases and other threats to the strength and productivity of our greatest asset--the American people.

Senator PROXMIRE. Dr. Biles, you keep assuming that if the Federal Government doesn't provide this funding that it won't be provided at all. Is there any possibility that the States can take up the slack, or that some other way can be found to raise the funds?

Dr. BILES. I will say two things. One is, these are public health programs, unlike the personal health services which are funded by Blue Cross, Aetna, all sorts of private sector activities. These programs must be funded by Government at some level.

Obviously, you can look to the States. I know the financial situation for the State of Maryland. I would say that it is adequate, it is not rosy. I know in our own budget process, we find increments, small increments, but in terms of a cutback in terms of dealing with these problems, frankly, Senator, I would be skeptical.

Senator PROXMIRE. My only other question relates to a statement that you make on page 3 of your prepared statement. You say, "the cost of a 6-month supply of DPT vaccine alone has gone up over 2,000 percent since 1982." Why is that?

Dr. BILES. This is primarily related to problems with liability. You may have heard of the problem with pertussis.

Senator PROXMIRE. Liability costs have skyrocketed in all kinds of areas. One solution is to appropriate more money, and another is to see what we can do about liability costs.

Dr. BILES. There have been a number of bills introduced. I know Chairman Waxman on the House side currently is working in this area, and that may be a very good point, to work together with the authorizing committee to get to a solution in this area, if you can.

Senator PROXMIRE. Thank you very much.

STATEMENT OF WENDY J. WERTHEIMER, DIRECTOR OF PUBLIC AND GOVERNMENT AFFAIRS, AMERICAN SOCIAL HEALTH ASSOCIATION

Senator PROXMIRE. Our final witness is Wendy Wertheimer.

Ms. WERTHEIMER. You have heard a lot about STD this morning, and I am usually the only one in support of it. You also heard testimony last week from a woman who had a frightening kind of attitude, who spoke about blaming the victims, which is the same attitude that you heard about the handicapped. That attitude is not unique to the handicapped.

I think that the reason that VD has been a problem for centuries now is that it is too often felt that people who get VD deserve it, and I think that is an underlying problem. AIDS, unfortunately, has taught us some very tragic lessons, if you have that attitude.

Diseases are diseases, and they start to cause massive problems. We in STD have learned that lesson in a tragic way. We have seen chlamydia now, between 3 and 10 million cases a year. In fact, Wisconsin last year made chlamydia a reportable disease last May, and in a few short weeks, there were 10,000 cases of chlamydia. Chlamydia causes sterility in men and in women. One hundred and ten thousand women will become sterilized each year from chlamydia and gonorrhea together.

Ectopic pregnancies, as you have heard——

Senator PROXMIRE. Why don't you inform the committee on chlamydia.

Ms. WERTHEIMER. No one knows because no one has been able to diagnose chlamydia until this year adequately. We have just sort of been treating everybody presumptively.

Chlamydia and gonorrhea will probably cause 60 percent of the ectopic pregnancies.

The other lesson that we have learned from AIDS is that people die. Often people have said, nobody dies from the disease. The fact is, people not only die from AIDS, but babies are dying every year in ectopic pregnancies. Ectopic pregnancies are the leading cause of maternal death among black women. There are babies that are dying and women who are dying from ectopic pregnancies probably caused by venereal disease.

Babies, as you have heard, are dying from herpes, and that is totally preventable. In fact, CDC had plans to start a neonatal herpes screening program this year. The Centers for Disease Control have been basically turned into an AIDS program, and $1.5 million has been reprogrammed out of the STD program into AIDS. The director of the STD program has now been detailed to AIDS. The STD program is really being left to sort of catch as catch can about these diseases which are sterilizing people, are killing babies every day at rates that are far more staggering in number than AIDS.

I just don't know how we can continue to accept trading lives for lives. AIDS is a frightening and awful problem. We have seen exactly what can happen if you just look at the other venereal diseases, you can see how bad it has been. There are 10 million cases of chlamydia, and probably 20 million people in this country have herpes. Gonorrhea is 2 million cases a year. Syphilis is still killing babies, syphilis which is from the dark ages, we still are seeing today.

We cannot take away and ignore STD's to fund AIDS. AIDS has got to be addressed fully and completely, and to the maximum that we are capable of doing, but that cannot be at the expense of the lives, the health, and the fertility of the rest of America.

The reprogramming is going to cause a big problem, and we hope that you will restore money, if not give the CDC a little more money, to begin the neonatal herpes screening, and also to start high risk screening for chlamydia. Pregnant women have got to be screened. There is 10 times a greater risk of spontaneous abortion and still birth among pregnant women with chlamydia.

I can only implore that these are all diseases that have to be addressed. They are diseases that are caused often by viruses that are spreading throughout every age group, every socioeconomic group in the country. To fund AIDS at the cost of other diseases is certainly not a rational policy.

Senator PROXMIRE. Thank you very much.

You say on page 2, "In fact, the State grant programs devote approximately 73 percent of the funds to gonorrhea control and 21 percent on syphilis."

Ms. WERTHEIMER. Yes.

Senator PROXMIRE. That leaves practically nothing for anything else.

Ms. WERTHEIMER. That is right, and part of the reason for that is that until this year, it was very difficult to diagnose chlamydia. In the past year, the FDA has approved a very inexpensive test for chlamydia so that we now have the capability of inexpensively screening for chlamydia, and we can treat. About 80 percent of the people have no symptoms, so it is a real hidden disease. You have to be able to screen.

Senator PROXMIRE. I get the impression from your testimony that you think that chlamydia is one of the principal venereal diseases that is overlooked and less effectively attacked with Federal resources.

Ms. WERTHEIMER. Chlamydia and herpes, both have been virtually ignored, partly because of the technology. Herpes, we still can't do a great deal for until the drugs are approved. For chlamydia, we now have an inexpensive way of treating it. I think that these two diseases have long been ignored, and they have now skyrocketed in number.

With $54 million for the entire STD program, it is real hard. Every time you take money away for another disease, it goes up. If you have to make choices, and you can only pick two diseases, that is what is done. There simply is not the funds to initiate the screening.

PREPARED STATEMENTS

Senator PROXMIRE. Thank you, Ms. Wertheimer. Your prepared statement and your oral presentation were very good, and most impressive. Thank you again. Your statement will be included in the record at this point along with other statements submitted for the record on appropriations for the Centers for Disease Control.

[The statements follow:]

STATEMENT OF WENDY J. WERTHEIMER

Mr. Chairman, on behalf of the Board of Directors of the American Social Health Association and our 30,000 members, I thank you for this opportunity to testify on behalf of the fiscal year 1986 appropriations for the Sexually Transmitted Diseases Program of the Centers for Disease Control.

As you know, the American Social Health Association is the only national non-profit organization directed solely on the problem of sexually transmitted diseases. Our organization has been in operation since 1912, and with a very small budget, we are struggling to fill the need in services, training, research, and information unmet by the federal government and the medical community. But, Mr. Chairman, no effort, no matter how well-intentioned, can succeed in combatting the massive epidemics of these diseases without the full commitment of the federal government.

The phones of our VD National Hotline are so jammed by callers in need of information that as many as 80% of callers are getting busy signals. Our Herpes Resource Center has responded to more than a million requests for information about herpes in the past five years. People in this nation are in desperate need of information which has not been forthcoming from their doctors, their families, their schools, their churches, or even from their local VD clinics.

These last few years have been extremely difficult ones in the area of sexually transmitted diseases. At no time in history has the epidemic been more frightening, more widespread, and of greater magnitude and menace.

It is always so surprising to me that in an age when we send astronauts (an even a Senator) into space with relative ease, and spend billions of dollars producing ever more powerful weapons of destruction, there are still babies in this country dying of syphilis. The age of Buck Rogers may have arrived, but one public health problem has remained locked in a time warp of the nineteenth century. Yet now the efforts of sexually transmitted disease control must address the medical mystery of the twentieth century — AIDS.

As you know from the testimony of the Centers for Disease Control, the federal Sexually Transmitted Disease control program has been almost exclusively focused on syphilis and gonorrhea. In fact, the state grant programs devote approximately 73% of their funds to gonorrhea control and 21% on syphilis. Although there have been some decreases in gonorrhea, it is still the number one reportable disease in the U.S., accounting for about 2 million cases each year. New obstacles confront gonorrhea control efforts. In the years 1979 to 1982 a 14-fold increase occurred in penicillin resistant gonorrhea. Outbreaks of disease resistant to other forms of antimicrobial therapy have also occurred which can have extremely serious consequences for disease control efforts, and increases the risks for those exposed to the organism.

Thus we have a VD control program which has been barely able to make an impact on syphilis and gonorrhea. Yet we know that more than 20 diseases are sexually transmitted and pose a major threat to our nation, particularly to young people, women, and their babies. Not only are there more diseases, but there are more people at risk, as the "baby boom" babies are now of child-bearing age, and they are becoming sexually active at younger ages while marrying at later ages than ever before.

Chlamydia is an organism which causes infections in men and women at rates several times that of gonorrhea infection. CDC estimates that at least 3 million cases of chlamydial infections occur each year. In men chlamydia causes non-gonococcal urethritis which can lead to sterility. In women, the consequences of chlamydial infection can be devastating, resulting in sterility or ectopic pregnancy. Chlamydia also affects babies, causing eye problems, deafness, and pneumonia in approximately 182,000 infants annually.

This past year has brought the benefit of important technology to the problem of chlamydia. Diagnostic tests which can detect chlamydia quickly and inexpensively have been approved by the Food and Drug Administration. These tests would permit screening and surveillance of this epidemic disease. Yet only 4% of state grant funds are spent on chlamydia, and there is no national surveillance of the disease. As resources, energy, manpower, time and laboratories are being devoted to AIDS, the possibility of implementing a chlamydia control program is dim.

Visits to medical practitioners for herpes have increased by more than 1,000 percent. Herpes is particularly difficult for women, for whom the disease appears to contribute to a higher risk of cervical cancer. Herpes can be passed to a baby by an infected mother. It is estimated that approximately 1200 babies will be affected by herpes this year. Of those infected, 50% will die, and half of those who survive will suffer permanent neurological damage.

Last year the Sexually Transmitted Diseases program awarded a grant to set up a pilot project on neonatal herpes surveillance. But the reprogramming of $1.5 million from the STD program to the AIDS alternative testing sites will prevent this important project from being instituted. A national neonatal herpes surveillance program will answer many questions that still remain about the transmission of herpes to infants and could help prevent the death of infants.

Probably the least understood aspect of the VD problem in this country is the impact of the diseases on babies. Many people choose to ignore the tragedy of venereal disease by thinking that no one dies of VD, but. Mr. Chairman, that simply is not true. There is, in fact, an epidemic of fetal death as a result of these diseases. The rate of ectopic pregnancy in this country has risen alarmingly in the last decade, in direct relation to the rise in rates of sexually transmitted diseases. In 1972 there were 17,000 ectopic pregnancies in this country. By 1980 there were 52,000 ectopic prenancies, and in just one year that rate increased to 68,000 ectopic pregnancies in 1981. Each ectopic pregnancy results in the death of the fetus, and in serious risk to the mother. In fact, ruptured ectopic pregnancy has now become the most common cause of maternal death among black women. At least half of all ectopic pregnancies can be attributed to pelvic infections caused by gonorrhea or chlamydia.

Thus, Mr. Chairman, this year infants will die as a result of venereal disease-related ectopic pregnancy; babies will be killed or brain-damaged by herpes infection; babies will be killed by the ravages of syphilis; and babies will die in the womb from maternal chlamydia infection.

Another sad result of these diseases is an alarming rate of infertility. This year between 110,000 and 150,000 women will be rendered sterile as a result of these diseases, 50,000 of those women will be under the age of 25. Venereal infections are the greatest single cause of unintended sterility in women of child-bearing age.

The VD problem in this country is massive — VD affects as many as one out of every 4 Americans between 15 and 55 years of age. The existing public health model was successful in combatting syphilis, but the epidemics of other diseases now are too pervasive and over-whelming for that system, and we must look for new approaches to reach greater numbers of people.

Despite the prevalence and complexity of the sexually transmitted disease epidemic, medical students today are not adequately trained in this field. A study published in the Journal of the American Medical Association determined that medical students receive an average of only 6 hours of training in sexually transmitted diseases out of more than 4,000 available medical schoool training hours. Ther medical establishment has been just as negligent as the government has been regarding this field of medicine. The effect of this is obvious — poor clinical services, undetected disease, higher disease rates. An additional result is that there is little incentive to encourage young doctors to devote their careers to this field.

We applaud the STD control program for its initiation last year of an effort to improve clinical training in medical schools through course curricula and liaison with public health programs. Six medical school/public health department programs were funded in fiscal year 1984, however budget constraints and the recent reprogramming will make it impossible for any new programs to be awarded funds in FY 1985. We believe it should be a national goal that every medical school in this country institute sexually transmitted disease training programs for its students.

The Sexually Transmitted Diseases control program, a program which has been so strapped for funds and so overburdened with the rise of the number of cases of STDs and the number of diseases now known to cause serious consequences, is now being drained of its resources, its manpower, its laboratory facilities, and its energy to face the national crisis of AIDS. Although only $1.5 million has been officially reprogrammed in FY 1985, the fact is that the impact on the STD program has been tremendous. Even the Director of the STD prevention and control program has been detailed to the AIDS program. Now that the HTLV-III antibody test has been approved, many of the country's STD clinics will become alternative testing sites. Field staff have been detailed away from STDs to the AIDS program and STD staff must be trained to handle the HTLV-III antibody testing procedures.

AIDS is the most important medical issue probably of our lifetimes. The Administration's unwillingness to ask Congress for money to address the problem is an irresponsible way to confront what Secretary Heckler has called the "Number One Public Health priority" of her department. The Department is supporting its role in AIDS by taking money away from other disease control programs, including many of the important programs of the Centers for Disease Control. Trading off human lives is not an acceptable approach.

We urge this Committee to provide substantial increases to national AIDS endeavors in research, services, control, and information and education. Our organization knows only too well what can happen when epidemics are inadequately addressed by the government. It is incomprehensible to think what terrible tragedy could lie ahead if the epidemic of AIDS ever reached proportions that are predicted. Uncontrolled epidemics increase geometrically. We cannot allow the epidemic of AIDS to increase to the extent we have allowed every other sexually transmitted disease. And now the government is contributing ever further to the epidemics of sexually transmitted diseases by depleting what meager resources there are for STDs to deal with AIDS.

We urge you to restore some support for the STD program by providing $10 million in supplemental funding in FY 1985, which would permit the program to initiate chlamydia screening programs in high risk groups and would permit the program to institute a neonatal herpes surveillance program. Further, we hope the Committee will provide an additional $10 million to the STD program in FY 1986 to permit the chlamydia initiative a small amount of growth. AIDS information and education programs are desperately needed, even more so now that the HTLV-III antibody test is being used. These projects would be funded by the STD program if there were money available.

The tragedy of AIDS should teach us some lessons. No disease, despite its mode of transmission, can be ignored. Sexually transmitted diseases are a major public health threat which must receive the collective attention and energies of the nation's Public Health Service. We cannot continue to trade off diseases for diseases, for we are only trading off human lives, with implications for generations.

STATEMENT OF GARY B. MACDONALD, EXECUTIVE DIRECTOR, AIDS ACTION COUNCIL

Mr. Chairman and distinguished members of the Subcommittee, the Federation of AIDS-Related Organizations AIDS Action Council represents the interests of this country's oldest and largest AIDS service-providing organizations -- groups such as Gay Men's Health Crisis in New York, San Francisco AIDS Foundation, AIDS Project/Los Angeles, AID Atlanta and the Fenway Clinic in Boston. Our objective is to monitor the Federal response to AIDS, and to ensure that adequate funding is available to address the many complex issues raised by this terrible new disease.

The Council commends you, Mr. Chairman, and the other members of the Subcommittee for your forthright support of Federal AIDS-related activities to date. Without your commitment, we would not have achieved the many scientific breakthroughs and greater knowledge of AIDS which have brought us closer to a resolution of this crisis.

But the AIDS public health emergency has only just begun, Mr. Chairman. Despite the brilliant efforts of our scientists, the selfless courage of thousands of citizens volunteering to serve people with AIDS across the land, and the untold anguish of those unfortunate enough to have contracted AIDS, our best efforts so far are only the first chapter in what threatens to be a very long and very sad story. AIDS is a public health emergency that simply will not go away.

Numbers alone do not convey the reality of AIDS, but they are instructive. More than 10,000 Americans have been diagnosed since the disease was first identified in 1979, and that number will double by this time next year. Already about 5,000 Americans have died of AIDS. By this time next year, some 10,000 will have perished.

We are losing some of our best and brightest, Mr. Chairman, the products of years of our society's investment in its future, the promising youth and the hard-working and capable adults who make this country tick. No one is invulnerable to this disease. Infants have it, and so do mothers, fathers, brothers, sisters, aunts, uncles and grandparents. The AIDS virus does not discriminate among its victims by age, sex, racial origin or creed. Americans in all walks of life are suffering.

The projections are disturbing. The Centers for Disease Control (CDC) estimate that the projected 20,000 cases by 1986 represent less than half -- perhaps as little as one-fifth -- of all those Americans who will eventually contract AIDS, or a lesser (but no less debilitating) form of the disease known as AIDS-related complex. This is true because 500,000 to one million citizens are already infected with the virus believed to cause AIDS, and about 10% of these individuals apparently go on to develop the disease. The implicit warning here is that AIDS may eventually kill 50,000 people, and afflict twice as many more. And this is to say nothing of those additional Americans who are being infected as we speak, and will continue to be infected, unless massive research, public education and prevention programs -- programs well beyond those already in place -- are undertaken immediately.

The cost of AIDS in human terms is incalculable, Mr. Chairman. Medical personnel are eloquent about the devastating toll this disease takes on the minds and bodies of its sufferers. And like all diseases, AIDS does not affect only those who are afflicted. Family, friends, loved ones and, to a significant degree, the entire surrounding community also suffer.

All of these factors define a serious and extremely complex public health emergency with which, I submit to you today, Mr. Chairman, the Public Health Service (PHS) has not dealt adequately to date. An emergency to which not nearly enough funding has been devoted to accomplish the urgent research and public education tasks at hand. An emergency which the PHS continues to address in an ad hoc, uncoordinated and unplanned way.

* * * *

In fact, a comprehensive national AIDS research, education and risk-reduction plan is what is most conspicuously lacking in the PHS's response to AIDS. Indeed, the lack of such a plan probably accounts for the inadequacy of that response. Without a comprehensive plan, PHS agencies have largely been left to their own devices to determine research and other AIDS-related priorities. Certain types of research, such as studies of AIDS treatment therapies, and certain types of activities, such as public education and prevention programs, have consistently been underfunded as a result. The PHS's ad hoc approach has also led to fiscal chaos within agencies as already scarce funds and personnel have been diverted or reprogrammed to AIDS activities from other, equally important programs.

o We ask this committee in its FY-85 supplemental deliberations to restore the following amounts reprogrammed out of other vital PHS programs to pay for AIDS activities: $10.4 million to CDC's sexually transmitted diseases, hepatitis B, AIDS epidemiology and National Health Services Corps programs; $4.8 million to the National Institute of Allergy and Infectious Diseases's ongoing research programs; and $5.5 million to the National Cancer Institute's ongoing programs. All of these agencies have had, in effect, to pit AIDS against other diseases in the laboratory -- a practice that is hardly conducive either to quality research or maintenance of the public's health.

Overall PHS budgeting for AIDS is also a serious, ongoing problem. As the Office of Technology Assessment's "Review of PHS's Response to AIDS" (February 1985) makes clear, the Administration has consistently asked Congress for less than it knew was needed to pay for AIDS activities, and Congress has thus been forced consistently to make up the difference.

o We therefore strongly urge this committee to direct the Public Health Service to develop a comprehensive AIDS research, public education and prevention plan within the first three months of fiscal-year 1986. The plan should specifically address community-based public education and prevention activities.

We are convinced such a plan will prove that the Administration's FY-86 request for $85.5 million in AIDS-specific funds is wholly inadequate to cover even those activities already in progress, let alone urgently needed new programs. PHS is spending much more -- $20.7 million more, in fact -- on AIDS in 1985 than the $97.4 million that was actually appropriated. The true FY-85 current services level of funding is thus $118.1 million, not $97.4 million. Comparing the true figure to the proposed FY-86 level of funding shows a real reduction of over $30 million next year. Such a reduction is unconscionable, in our judgment, at a time when the AIDS epidemic is expanding so rapidly.

o We strongly urge this committee to appropriate funds to FY-86 AIDS activities at levels truly commensurate with the current services needs of PHS agencies carrying out the work. We believe that a realistic total current services AIDS budget for 1986 will be at least $120 million.

Two areas of AIDS funding merit special attention. The first is public education and prevention activities. Nothing is more important at this point, nor for years to come, than that we significantly slow the spread of the AIDS virus. The only means of achieving this goal in the absence of a vaccine (and an AIDS vaccine is still years away) is to teach people how not to transmit the disease. Yet as a percentage of overall AIDS funding, public education and prevention have consistently gotten the least amount of money. Incredibly, only $400,000 has so far been channeled by PHS to the local, community-based organizations throughout America which from day one of the AIDS crisis have borne the real burden of educating Americans, particularly Americans at high-risk, about this disease.

o We urge this committee to enact a major new FY-86 appropriation to fund a national AIDS education and prevention program. We believe a comprehensive AIDS plan will show that as much as $20 million is needed to carry out the education program. At least half of the final appropriation should be earmarked by PHS for community-based prevention activities.

Several PHS agencies, such as NIAID, are ideally equipped to mount AIDS outreach programs but may lack statutory authority and/or adequate funds to do so. Where this is the case, proper authority must be extended and funds provided to do the job.

The second area of AIDS funding which merits special attention is research into treatment therapies. The bulk of AIDS appropriations so far has gone into epidemiological and basic biomedical studies. These are commendable endeavors, but they do not address the terrible suffering of people with AIDS.

o We urge this committee to mandate a review of AIDS biomedical research priorities in order to determine whether a greater percentage of existing resources could not be devoted to treatment therapies research. Important research should not suffer in a reevaluation of priorities. It is undoubtedly possible to moderate emphasis on an AIDS vaccine (without hurting its long-term prospects) in favor of the more immediate need to treat thousands of people with AIDS effectively.

o In order to understand the psychological effects of AIDS on sufferers and surrounding community alike, and to prevent further hysteria about the disease, we also urge an FY-86 appropriation of at least $5 million to study psychosocial aspects of AIDS.

Finally, Mr. Chairman, we appreciate the opportunity to make a key point about AIDS which is only now coming to be understood. This is not and never has been a "gay disease." The fact that many forces in our society find it convenient to think of AIDS in that way has detracted immeasurably from our search for the truth about this deadly new illness. We must set the record straight in a responsible and compassionate way. We must approach AIDS like the very dangerous general public health emergency it is. Potentially, we are all vulnerable to viruses such as the one which causes AIDS. We must act now, quickly and with all appropriate resources, to eradicate this threat. To do anything less is to scoff at the precious lives that have been lost as well as all those precious lives which remain at risk.

Thank you very much.

SUBCOMMITTEE RECESS

Senator PROXMIRE. The subcommittee will stand in recess until Thursday, May 2, when we will meet here again in SD–116 and hear from public witnesses on the budgets of the National Cancer Institute, the National Heart, Lung, and Blood Institute, the National Institute for Dental Research, and the National Institute on Arthritis, Diabetes, Digestive, and Kidney Disorders.

[Whereupon, at 12:10 p.m., Wednesday, May 1, the subcommittee was recessed, to reconvene at 9:30 a.m., Thursday, May 2.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

THURSDAY, MAY 2, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:30 a.m., in room SD–116, Dirksen Senate Office Building, Hon. Lowell P. Weicker, Jr. (chairman) presiding.

Present: Senators Weicker, Hatfield, Specter, Proxmire, Chiles, and Burdick.

NONDEPARTMENTAL WITNESSES

NATIONAL CANCER INSTITUTE

STATEMENTS OF:
- **ALBERT H. OWENS, JR., M.D., MEMBER OF PUBLIC ISSUES COMMITTEE, AMERICAN SOCIETY OF CLINICAL ONCOLOGY**
- **GERALD P. MURPHY, M.D., D.SC, IMMEDIATE PAST PRESIDENT, AMERICAN CANCER SOCIETY, PRESIDENT, ROSWELL PARK MEMORIAL INSTITUTE**
- **TIMOTHY R. TALBOT, JR., PRESIDENT EMERITUS, FOX CHASE CANCER CENTER, PHILADELPHIA**

OPENING REMARKS

Senator WEICKER. I just want to remind everybody that the ground rules are very simple. The green goes on, you go. The yellow light is a warning light, and the red light means that is the end. This is not done for my convenience. This is done for accommodating all of the other people who are trying to testify. I would appreciate it if I don't have to bring down the gavel on anybody.

With those opening remarks as to the ground rules, it is nice to have everybody here today. Our first witness is Dr. Albert Owens, a member of the public issues committee of the American Society of Clinical Oncology.

Dr. Owens, welcome back. Who do you have with you, Doctor.

Dr. TALBOT. I am Dr. Timothy Talbot, and I believe that I am on next.

Dr. OWENS. This is Dr. Murphy, Senator.

Senator WEICKER. We have all three of you, Dr. Murphy, Dr. Talbot, and Dr. Owens. It is nice to have you here, and you proceed in any way that you see fit.

PREPARED STATEMENTS

Dr. OWENS. My full-time job is as director of the Cancer Center at Johns Hopkins, but my purpose here today is to represent the American Society of Clinical Oncology. I think we have submitted written testimony, and I would like to just make two or three points.

Senator WEICKER. We will place all of the statements in the record and then you may proceed.

[The statements follow:]

STATEMENT OF ALBERT H. OWENS, JR.

Mr. Chairman, I am Albert H. Owens, Jr., M.D., Director of the Johns Hopkins Oncology Center in Baltimore, Maryland. Also, I serve there as Professor of Oncology and Professor of Medicine.

I appear before you today on behalf of the American Society of Clinical Oncology (ASCO); I am a member of the Public Issues Committee, and a former President of ASCO.

Today I speak in support of increased funding for the National Cancer Institute. I know that institute well, and currently serve as a member of the Cancer Center Support Review Committee there.

So that you may place the concerns of the American Society of Clinical Oncology in perspective, I would like to supply you with some information about it.

The American Society of Clinical Oncology was founded 20 years ago and has become the nation's largest organization of specialists involved in providing cancer patient care, conducting clinical cancer research and training cancer physician specialists. Members of this Society are involved directly, or as consultants, in the care of the majority of the cancer patients in the United States. Its members include the nation's leading physicians in medical oncology, pediatric oncology, radiation oncology, surgical oncology, gynecologic oncology, and also basic scientists in pathology, immunology, pharmacology, biostatistics, and other areas of basic biomedical science. Collectively, this Society represents the nation's major resource of specialists in the diagnosis and treatment of cancer patients, the application of research to cancer patients and the training of the cancer physicians and clinical researchers of the future. Approximately half of its members are practicing physicians caring for the nation's cancer patients in their offices and in many community hospitals, and half are engaged in research and training in literally all of the nation's schools of medicine, cancer hospitals, centers and institutes.

NATIONAL CANCER PROGRAM

Many of my colleagues here today will speak in support of cancer research funding.

Also, Mr. Chairman, as you know, there is currently going forward in the Congress a bill reauthorizing various components of the National Institutes of Health, including the National Cancer Act, originally passed in 1971. Although this is not the committee concerned with the reauthorization of the total National Cancer Act, as that is done by the authorizing committees of the Congress, nevertheless I know that members of this committee have significant influence on the policies developed by the Senate in regard to biomedical research, and so would like to make just a few comments about the National Cancer Act and the achievements generated as a result of it over the last 14 years.

I know that you feel, as we do, Mr. Chairman, that 14 years after the passage of the National Cancer Act, it should hardly be necessary to once again make the case to the appropriations and authorization committees regarding the remarkable forward progress, and the necessity of continuing the National Cancer Act as it was originally developed. It has proved to be an unarguable success.

Therefore, we stand with the newly established National Coalition for Cancer Research in support not only of the continuation of the National Cancer Act, but in regard to your committee, for the full funding of the so-called "bypass budget" for the NCI of $1.460 billion for fiscal year 1986.

ACHIEVEMENTS LINKED TO THE NATIONAL CANCER ACT

Your committee, Mr. Chairman, and the entire Congress has strongly supported the National Cancer Institute's programs in the past, and you and your colleagues should be credited with some of the advances and achievements that have been made possible as a result of this funding. Here are some examples:

. Since 1971 when the Cancer Act passed, basic biomedical discoveries have laid the foundation for advances in cancer diagnosis, treatment, and prevention of cancer.

. Funded research has led to the current biologic revolution. For example:

- The discovery of the enzyme reverse transcriptase first found in tumor viruses made it possible to make copies of genes for use in recombinant DNA technology, which is the basis of most of the current biotechnology industry and new approaches to cancer diagnosis and treatment.
- Restriction endonucleases, nature's scalpels for cutting DNA, also play a role in recombinant DNA technology, and thus are important in the current biotechnology industry and also in new approaches to cancer diagnosis and treatment.
- The discovery of oncogenes is important in understanding growth regulation of normal as well as cancer cells; and
- Human retroviruses have been identified as the cause of T cell leukemia and acquired immune deficiency syndrome (AIDS).

. 50 percent of cancer patients are now curable as compared with 41 percent in 1973.

. Major treatment advances have been made in childhood cancers, leukemias and lymphomas, testicular cancer, ovarian cancer, breast cancer, rectal cancer and non-small cell lung cancer.

- Significant strides are being made using radiotherapy, bone marrow transplantation, and using monoclonal antibodies in the diagnosis and treatment of cancer.

- 59 cancer centers nationwide participate in basic and clinical research and provide state-of-the-art cancer diagnosis and treatment to cancer patients.

- An expanded and intensified cancer control and health education program and prevention awareness program stresses the links between lifestyle (i.e., smoking and diet) and cancer.

CLINICAL INVESTIGATIONS

It is now becoming increasingly clear that the support of the Congress for funding of biomedical research is now permitting the outpouring of research findings at an ever increasing and unprecedented rate. It is also true that, almost without exception, the major advances in the treatment and cure of human cancers have resulted from carefully designed clinical trials, utilizing these findings. As you know, the majority of controlled clinical trials are conducted by physician-investigators in the nation's cancer centers and cooperative groups. It is the clinical oncologists, who have been trained in the design, conduct and evaluation of clinical trials, which constitute the nation's expertise and the application to cancer patients of the advances in laboratory research that may lead to the prevention, detection, treatment and cure of more human cancers. As was indicated last year by the ASCO witness, "The hallmark of the 1980's will be an even closer collaboration among basic and clinical scientists in order to exploit the potential advantages to cancer patients brought by the discovery of monoclonal antibodies, oncogenes, recombinant DNA technology, new chemical and biological agents, and the discovery of compounds capable of preventing or reversing the effect of carcinogens. The ultimate test of how these recent breakthroughs in basic science can benefit humankind will be in the clinic and at the bedside."

SURVEY OF CLINICAL RESEARCH AT NIH

Last year, in the House bill report accompanying the appropriations bill for Labor-HHS-Education, the following language occurred:

> "The Committee requests a study by the National Institutes of Health of the patterns of funding of clinical research by all institutes, and especially the National Cancer Institute, since Fiscal Year 1982. The study should include research involving human subjects, funded by each type of award employed, specifically including cooperative groups research, other clinical trials, and intramural clinical research. The number of awards and the dollars allocated should be shown for each type of funding mechanism by year.

"This study will enable the Committee to ascertain the impact of policy decisions on the funding of clinical research by all mechanisms and should be made available to the Committee prior to hearings on the FY 1986 budget."

We understand that the NIH has forwarded its report to the two Appropriations Committees, and we are looking forward to receiving copies so that we may analyze for this committee and its staff the implications for clinical research.

A number of us are increasingly concerned that perhaps clinical research is not receiving the support that is required, in order to translate the basic research findings into appropriate care as quickly as possible.

We recognize that appropriate funding levels for basic and clinical research are really a matter for the NIH, the NCI, and the scientific community to determine from their experiences; and the Congress, and especially the Appropriations Committees, have always made it a matter of policy not to interfere in these scientific decisions. We want to make it clear that we are not seeking congressional intervention in this matter, but are indicating that we are raising this as an issue that should be considered at this time by the scientific community. We are, however, concerned that the allocation of funds to support the NCI program of clinical research in cancer centers and by national cooperative groups has not kept pace with inflation nor has it kept pace with the opportunities now available to us.

NATIONAL INSTITUTES OF HEALTH: Funding Requirements

We are deeply appreciative of the work of this committee and especially you, Mr. Chairman, in attempting to resolve the matter of the proposed cutback by the Office of Management and Budget of the levels proposed by this committee and the Congress last year, of 6,500 new grants, to 5,000, for fiscal year 1985. We have been following your work closely, and are deeply appreciative of the efforts that you are making in behalf of biomedical research. These cutbacks will affect not only new research grants, however, but other programs, including cancer centers.

We are also aware of the very strong commitment that you have given in hearings earlier this year, when Administration witnesses appeared before you about this matter.

We come before you as advocates of cancer patients, and of the research community which realizes the opportunities available, and so indicate to you that we are hopeful that, even in these stringent economic times, the NIH budget can be increased. Last year we supported the recommendations of the Ad Hoc Group for Medical Research Funding. which you cited so often in your speeches on the floor of the Senate, and also outside the Congress.

We support, again this year, the figure arrived at by this Ad Hoc Committee. We think it represents an excellent advocacy figure; it is $5.7 billion for NIH.

SUMMARY

In summary, Mr. Chairman, we make the following recommendations:

1. We urge that the "bypass budget" of $1.460 billion for the National Cancer Institute be adopted by the Congress.

2. We urge that the figure of $5.7 billion of the Ad Hoc Group for Medical Research Funding also be agreed to by the Congress, for the entire NIH.

3. We support the activities you and your subcommittee colleagues have taken in regard to resolving the fiscal year 1985 issues of the level of new research grants; we should also like to make the point, however, that not only at issue are the number of research grants, but also the level of funding of cancer centers and of clinical research, which is also intertwined with the larger issue of grants.

Thank you for the opportunity you have given us to state our views. I will be pleased to answer any questions you may have.

STATEMENT OF GERALD P. MURPHY

I am Dr. Gerald P. Murphy, immediate past president of the American Cancer Society and currently Co-Chairman of its Public Issues Committee. I am also Director of the Roswell Park Memorial Institute in Buffalo, New York. Mr. Chairman, the American Cancer Society will spend $74 million this year on cancer research. This is by far the largest amount of research support by any private sector agency -- and these are all private funds. The American Cancer Society accepts no funds from the government. But, the major source of funding for cancer research is the federal government, through the National Cancer Institute. I am here today to represent the position of the American Cancer Society on the FY '86 NCI budget.

Mr. Chairman, on behalf of the Society and its two and one-half million volunteers, I want to express our deep appreciation and gratitude to you and Members of this Committee for your strong and courageous support for cancer research.

In 1983 and 1984 the American Cancer Society recommended citizen's budget figures of $1.5 billion for the annual appropriations for the National Cancer Institute. The citizen's budget was based on what the Society determined would be the amount of funding that could be utilized effectively by the National Cancer Institute and maintain the dynamic momentum that had been achieved in the battle against cancer.

The Society recognizes that in the current national economic crisis it would be unrealistic to expect that a figure of $1.5 billion would be appropriated to NCI for FY '86. On the other hand, a national investment of $1.5 billion is needed to just maintain the momentum that has been achieved.

The American Cancer Society is not asking government to do it all. In a new departure for the Society, we are asking that Congress appropriate, and the White House approve, a FY '86 appropriation of $1.3 billion for the National Cancer Institute. At the same time, to achieve $1.5 billion in value of productivity in cancer research, the Society calls on the cancer research community -- research institutions, investigators, suppliers, and others who impact on the cost of cancer research -- to make a special commitment in FY '86 to tighten their belts, do more with less, and accomplish $1.5 billion worth of cancer research with the $1.3 billion appropriation.

Cancer research is expensive, and the Congress has consistently over the years recognized that high investment has yielded high returns. Cancer is an expensive disease. It is expensive because it is probably the most complex biological problem man has ever confronted. A study by the Blue Cross and Blue Shield Association showed that the average American who died of cancer in 1983 accrued more than $22,000 in medical expenses alone during the last year of life. Cancer, however, is a long struggle, and many patients require elaborate and costly treatment for several years.

Cancer treatment, in fact, costs the U.S. government money. The third National Cancer Survey showed that, for patients under age 65, payment for cancer treatment came from Blue Cross and other private insurers in over 77 per cent of the cases. But, Mr. Chairman, cancer is all too often a disease of the older population. As more people enter their sixties, more will develop cancer. And, according to this same survey, it is Medicare that pays the treatment costs for nearly 88 per cent of cancer patients who are over 65.

But cancer costs this country more than medical expenses. A person who is seriously ill with cancer is generally unable to work regularly and cannot contribute to the economy. Furthermore, federal, state and local governments cannot collect the same amount in taxes that the person paid when well and working full time. The National Center for Health Statistics found in 1980 that when lost wages and productivity were added to medical costs, cancer cost America $39.2 billion. Obviously, this total has risen during the five years since this study was performed.

I have not touched upon the cost of cancer that cannot be measured in dollars. The physical toll upon the patient, his or her emotional suffering, the anxiety and disruption of the family -- these are human costs of cancer that cannot be calculated.

But many of you have gone through these experiences with members of your own families, or close friends. I am certain that I do not have to dwell with you here on the feelings that such memories generate.

But my message to you is one of great hope. Our immediate concern is continued, adequate funding, not of a losing battle, but of a dynamic national investment that is finally breaking down the seemingly impenetrable barriers that cancer used to represent. I would like to tell you about some of the astonishing strides that have been made in cancer research in just the past few years.

We all know that the best way to prevent lung cancer is to avoid smoking tobacco. But people have also wondered whether it's possible to prevent cancer through other changes in their life-style. Research is showing us that the answer is yes. One important key is diet.

Most Americans consume about 40 per cent of their calories in the form of fat. If they cut down to 30 per cent they would reduce their chances of getting colon cancer, breast cancer, and possibly cancers of the prostate and ovaries. At this moment, the National Cancer Institute is conducting a long-term study of over 12,000 women, to determine whether a very low-fat diet can protect women who are at high risk of developing breast cancer. This diet -- in which only 20 per cent of the calories are derived from fat -- is also being tested in women who have had breast cancer, to find out whether lowering fat can lower their risk of recurrence.

Dietary research has also found that people who eat plenty of foods containing sources of vitamin A have a lower risk of developing several forms of cancer, including some types of lung cancer. The key factor in these foods is a substance called beta-carotene. As the name implies, it's found in carrots, as well as other vegetables and fruits. Laboratory research has found that when compounds related to beta-carotene are added to cancer cells, the cells lose their immature, undisciplined qualities. In a sense, the cancer cells "grow up". This research has important implications not only for a healthy diet -- but for improving our understanding of cancer cells.

Cancer cells can be made to mature and turn into normal cells by a number of compounds. Some are related to beta-carotene and are known as retinoids -- but there are other "maturing agents." Could this line of inquiry lead to a whole new approach to cancer treatment? Possibly. But only continued, high-quality research can tell us for certain.

The quality of research is all-important. As the individual responsible for a major basic and clinical research facility, I can assure you that cancer research can neither be done overnight -- nor undertaken in a day. Research is a continuum. Today's achievements grow out of yesterday's hard work -- which, in turn, evolved from the discoveries of the day before yesterday.

Cancer research requires long-term planning, dependable funding, and, perhaps most important, a cadre of well-trained, intensely motivated scientists to do the work.

The far-sightedness of Congress in the past has provided the American cancer research effort with these crucial elements. As a result, this country unquestionably leads the world in cancer research. The great discoveries of the past decade, which may well lead to the conquest not only of cancer but of many other diseases, have all come from American laboratories -- or have been based on the work of American investigators.

Dr. Robert Weinberg of the Massachusetts Institute of Technology and Dr. Stuart Aaronson of the National Cancer Institute have been pioneers in the study of oncogenes. These are genetic switches in normal cells which can be turned on under the wrong circumstances, leading the cell to become malignant.

Recombinant DNA methodology enables scientists to dismantle the genetic material of a cell and study it, part by part. This technique has been invaluable in the study of oncogenes -- and many other genetic characteristics or normal and cancer cells.

Two European scientists, Drs. Cesar Milstein nd Georges Kohler won the Nobel prize for giving the world monoclonal antibody technology. This monumental contribution was build directly on work by Dr. Michael S. Potter of the National Cancer Institute. Monoclonal antibodies are specialized particles which identify, measure and trace biological substances.

Dr. Robert C. Gallo at the National Cancer Institute has identified the first virus that leads directly to a malignancy in human beings, and has found a related virus which causes Acquired Immune Deficiency Syndrome (AIDS). This latter disease leaves the patient vulnerable to infections and is associated with the development of certain cancers. Dr. Gallo has developed a test for traces of the virus in blood, to insure that life-saving transfusions and blood products are not contaminated.

Most of the research I have just described was underwritten directly or indirectly by the National Cancer Institute.

The tradition of adequate funding, established by the National Cancer Act of 1972, has created a unique climate in which excellence has flourished. The intellectual excitement of fast-moving cancer research has attracted the best and brightest of young scientists. The pace has quickened. The momentum of research has brought us to the brink of discoveries as profound as man has ever made.

To interrupt this progress would be a national tragedy. Any reduction in the level of funding would be like throwing a boulder into the path of a marathon runner just before the finish line. TO consolidate the success of recent years, applying it to people who have cancer today and people who will develop cancer tomorrow, it is vital that the federal government must continue to support cancer research at a level that will keep the life-giving discoveries coming. Momentum of cancer research is a fragile commodity. It has been nurtured, cultivated carefully and firmly developed. The brightest minds have been encouraged to join the battle and have achieved a high pitch of productivity. But momentum remains volatile and depends on adequate funding. Any appropriation less than $1.3 billion would cause the momentum or research to dissipate and would waste much of the effort and investment of previous years.

We have estimated that it would require $1.5 billion to maintain the present pace of research. We recognize, however, that American scientist, like all Americans, are threatened by the looming Federal deficit. All of us, in our homes and our business, must try to economize wherever we can. The American Cancer Society therefore, calls upon investigators, administrators, and everyone involved in the cancer control program to combine good citizenship with good science and to find prudent ways of spending a little less, and accomplishing more -- to get a bigger bang out of the buck, so to speak.

Where existing equipment can be repaired or updated, achieving the same results as an expensive new machine, we encourage investigators to make do with what they have. Without compromising quality, supplies should be bought from the most economical source. In the laboratory and at the bedside, just as at home and in the halls of government, small, common sense economies can add up to important savings.

Thus, we believe the $1.5 billion worth of research needed to maintain the pace of excellence in the battle against cancer can, in fact, be achieved with a federal appropriation of $1.3 billion. I certainly intend to work towards that objective at my Institute.

Although this is an appropriations hearing, Mr. Chairman, I would like to note that the American Cancer Society believes that only if the $1.3 billion is properly administered can these savings be effected. In our opinion, it is imperative for the present streamlined management structure of the National Cancer Institute to remain in place. This structure, which was built into the National Cancer Act of 1972, is responsible for much of the outstanding cost-effectiveness of the National Cancer Program in the past. Only with its modern, highly appropriate structure, can the National Cancer Institute be assured of the flexibility, autonomy, and the power to make scientific decisions based on the best scientific evidence. When the reauthorization of the National Cancer Act is brought up, we urge most strongly that it be passed.

The National Cancer Program is one of the glories of the American people, and of our free democratic system. Through you and your colleagues, we have fostered a quality and a pace of cancer research that reflects their deep concern with this disease. We ask that you continue to act upon that concern and appropriate for the National Cancer Institute the $1.3 billion it needs for this urgent effort during the coming year. Thank you.

STATEMENT OF TIMOTHY R. TALBOT, JR.

Thank you for the opportunity and privilege of presenting to this committee the concerns of the Association of American Cancer Institutes, (AACI) which includes all of the cancer centers in the nation. I am Dr. Timothy R. Talbot, Jr., President Emeritus of the Fox Chase Cancer Center in Philadelphia, and former President and Chairman, as well as a founding member of the AACI.

Mr. Chairman, the first thing that I want to do is to thank you and members of your committee for your efforts to correct the grievous and destructive actions of the OMB, for your expressions to Dr. DeVita of your concern, and for your consistent attention to the nation's health, economy and welfare.

On November 17, 1944, President Roosevelt addressed a letter to Dr. Vannevar Bush who was then the Director of the Office of Scientific Research and Development, which, as you know, played such an important role in this nation's accomplishments during the second world war. The President asked how we should plan to continue the research efforts by our nation's scientists "in the days of peace ahead for the improvement of the national health, the creation of new enterprises bringing new jobs, and the betterment of the national standard of living;" -- and how "can an effective program be proposed for discovering and developing scientific talent in American youth so that the future of scientific research in this country may be assured".

On July 5, 1945, Dr. Bush, replied in his famous report which he called "Science, The Endless Frontier". It shaped the future of this country' s pathways to world-wide leadership in the sciences, especially in biology and medicine. It is a report that should be read by everyone, at all levels, who is concerned in any way with these matters -- lest we forget where we want this nation to go and how to get it, and keep it, on the pathway that was described 40 years ago by the President and by Dr. Bush.

We live in a scientific and technological era. Therefore, when we talk about research we are really talking about everything -- our health, of course; but also our industrial leadership, our productivity, our security, our sense of progress, our pride and our welfare. In this age these are all dependent upon the nurturing of our scientific vitality in all areas. The stable support of research endeavors and education are, therefore, not some abstract game for a few people to play, but are the foundation and source of the nations strength. We won't need to lose a war if we do not realize this -- we will destroy ourselves. How can we effectively transmit this message to all who are concerned?

There are several important facts that need to be made visible:

- As reported in the "Cancer Letter" for April 9, 1985, the recent actions of the OMB have already led to what is called a "mixed bag". Four centers, whose renewals were awarded in the first cycle of 1985 received 95% of the peer review recommended funding levels. The seven centers who were in the second cycle have been told "that for now" they should count only on receiving a five percent increase over their current level. This resulted in part from the NCI being forced to "forward fund" one center for three years. If this process continues there will obviously be even greater injustices in the future, as well as considerable harm.

- Since 1976, there has been no growth in constant dollars for the NCI. Since 1980, the level of support has been seriously reduced. In 1983 it was below the 1974 level. This is a serious threat to our research endeavors.

- Cancer Research has been cost-effective. The saving of useful productive lives has saved more money and also produced much more money than has been spent, as documented by Dr. Emil Frei and by others. The ratio of savings to expenditure may be as high as 15 to 1 or more.

- There are other economic justifications for the support of research, as exemplified by the billions of dollars of revenues from applied technology resulting from biomedical research.

- Significant progress has been made and will continue to increase. We support the position of Dr. DeVita, which states the goal of reducing cancer by 50% by the year 2000. There is reason to believe that this can be done -- but not without stable support.

- We agree with the NCI justification of their budget from which the following paragraphs are quoted:

"Cancer centers are vital links in the cancer research and control network which has been established through NCI support and will continue to be utilized to achieve the Institute's goals for the year 2000. Many centers not only are foci for high-quality laboratory, clinical and cancer control research, but also are specifically organized to transfer research results expenditiously to general applications. Centers provide excellence in research and training while expanding cancer control activities. Many centers have a network of local hospitals and other organizations similar to the larger NCI network."

"The Cancer Centers Program provides core grant support for its multidisciplinary programs in basic and clinical cancer research to education and research institutions. Centers are an important national resource for research, education, training and community outreach activities. The major purposes of the Cancer Centers Program are to facilitate interdisciplinary collaboration and coordination of research through the use of shared equipment and specialized research facilities; provide support for key professional staff; foster participation in national and regional clinical investigation programs; and contribute to the development and strengthening of specific research programs of the centers through support of investigators and newly recruited scientists during the early phase of their research efforts."

"Because of their general excellence in basic research, a significant portion of the NCI funds in support of extramural research projects are awarded to institutions which receive cancer core grants. As a consequence, many of the research accomplishments cited by programs that support those research projects could also be considered accomplishments of the cancer center core grants. Core grants funds impact directly on this research through support of various shared services and facilities in the centers and by increasing interdisciplinary activities. Notable examples of research carried out at these institutions include oncogene and monoclonal antibody research, and heavy involvement in research activities resulting from the increase in Kaposi's Sarcoma and AIDS cases."

We have the following requests that we wish to present for your consideration. We believe that:

- Cancer Center Support Grants should be fully funded, as stated in bill report language previously. (Ref: Calendar No. 1042, 98th Congress 2nd Session; Senate, Report 98-544. Report 54, June 29, (legislative day June 25) 1984.)

- The NCI by pass budget should be the minimum amount appropriated -- this is $1.460 billion.

- The sciences are all greatly interdependent; therefore, we also strongly endorse the recommendation of the ad hoc Committee for Biomedical Research that $5.6 billion should be made available to the NIH.

Thank you, Mr. Chairman, for your attention and support.

STATEMENT OF DR. ALBERT OWENS

Dr. OWENS. One is that the society that I am representing today is the largest one that is concerned with scientists and health care professionals who deal with the cancer problem that we have in our country. I think that we all are extremely concerned. We want to thank you and Senator Inouye for your efforts to amend the budget bill, by the way, and the NIH support which includes work for cancer research and cancer centers. We have tried to alert our membership to indicate their support for your efforts. Thank you very much for that.

We know that this particular committee is not concerned with reauthorization, but to us the National Cancer Act first was enacted in 1971 is a very important thing to renew. I think it represents to us a national commitment. It provides the Director of the Cancer Institute with certain very special prerogatives which we think are important. The success over the last 14 years in conducting scientific programs, and applying scientific knowledge to human service, we think is unarguable. We would urge you and the members of your committee to use your influence to see that it is reauthorized.

By way of example, we would like to support the bypass budget, which the Director of the NCI has submitted. This is for $1.46 billion for fiscal year 1986.

We have, in our written testimony, cited a number of achievements which are linked to the Cancer Act and the research support which augments it. I would simply like to say, in general, in the last several years, the tide coming from scientific endeavors is just undeniable. The work that has been done in cancer research, I think, is directed at very basic life processes themselves. All of the scientific activities are interrelated, and I think we don't want to do anything that disturbs this flow.

We are concerned that anything that tampers with funding that relates to inconsistency and does not sustain this effort is detrimental overall.

We would like also to see that the Institutes and the people are supported, the clinical researchers, the cancer centers, the institutions that take this knowledge and apply it to human use. We would like to see also that the young people who are coming along, who will carry the profession along, will be trained, introduced, and support in the future.

We thank you very much for everything that you have done in the past. We know that you have supported the 6,500 grant level funding. We think again that it is important to sustain that level of activity on behalf of our entire population and its health.

Senator WEICKER. Thank you. I will get back to you for questions, but why don't you all testify first here.

Dr. Murphy, you are next.

STATEMENT OF DR. GERALD MURPHY

Dr. MURPHY. Good morning, Mr. Chairman.

I am representing, as you know, the 2.5 million volunteers of the American Cancer Society, who are supporting this year, through their own private funds, $75 million in cancer research activities. My full-time activity for myself is that of director of the Roswell Park Memorial Institute of Buffalo, NY.

It is true, the American Cancer Society does not accept any Federal funds, but we do appear here today to express our viewpoints on the fiscal year 1986 National Cancer Institute budget.

As you know, in 1983 and in 1984, we testified for a full level of funding of $1.5 billion, a level which is fairly well reflected in what we heard from the bypass budget of Dr. DeVita. The citizens' budget was based upon our knowledge and assessment that this money could be effectively used in a variety of areas.

However, this year, in recognition of the current fiscal dilemmas and responsibilities that you and others must bear, we are recommending a full level of funding of $1.3 billion which would maintain current activities. That philosophy, we feel, is very close to your own amendment to the budget, which was introduced here just a few days ago.

That $1.3 billion represents an increase of approximately $120 million. In turn, we feel that the remaining funds, the $200 million, can and must be sought on a voluntary basis from the Cancer Society, the Cancer Institute researchers, and the like, to tighten their belt for this year, to accept the realities and the necessity of compromise, but to maintain the current activities of the National Cancer Institute.

Our position on this is quite clear. We also recognize and record the fact that cancer really is an economic drain on the United States in many different ways. A Blue Cross/ Blue Shield Association study revealed that in the last year of life, the American cancer patient spent $22,000 personally to maintain their various affairs. A 1980 study revealed that in terms of full loss of fiscal capacity and expenditures, the cancer patients that year cost this country, this Government, $39.2 billion. Surely, in the past 5 years, that level has increased.

Mr. Chairman, my testimony has been entered. I will not reiterate the advances in cancer research and treatment that have accrued in the last 2 years. We will, however, reemphasize again our appreciation for what you and your committee have generously sponsored, a generous program for the American public which they richly deserve.

We also, of course, recognize that this is an appropriations hearing, but we, too, join with others, as we have in the leading position in 1971, to support the National Cancer Act, particularly the bypass authority for the Director of the National Cancer Institute, the appointment of the President's panel, and the direct appointment of the President's National Cancer Advisory Board.

I wish to thank you and your associates for this opportunity to express our concerns. We think the level of $1.3 billion can be effectively used based on our assessment of the current activities of the National Cancer Institute.

Senator WEICKER. Thank you very much.

Dr. Talbot.

STATEMENT OF DR. TIMOTHY TALBOT

Dr. TALBOT. I want to join, Mr. Chairman, in expressing thanks to you and your committee.

By the way, we are going to make every effort to contact various Members of the Congress to urge funding and support for your latest amendment.

I am Dr. Timothy R. Talbot, president emeritus of the Fox Chase Cancer Center in Philadelphia, and former president and chairman of the Association of American Cancer Institutes which, as you will recall, includes all of the cancer centers in this Nation.

Going back in time, Mr. Chairman, in 1944, President Roosevelt addressed a letter to Dr. Vannevar Bush who was then the Director of the Office of Scientific Research and Development. The President asked how we should plan to continue the research efforts of our Nation's scientists in the days of peace ahead for the improvement of the national health, the creation of new enterprises bringing new jobs, and the betterment of our national standard of living; and how can an effective program be proposed for discovering and developing scientific talent in American youth so that the future of scientific research in this country may be assured.

In a landmark reply of 1945, Dr. Bush, in his famous report, which he called "Science, the Endless Frontier," shaped the future of this country's pathways to worldwide leadership in the sciences, especially in biology and medicine. It is a report that I would urge everyone to read at all levels who is concerned in any way with this problem, lest we forget where we want this Nation to go and how to get it there, and keep it on the pathway that was described by Dr. Bush and the President 40 years ago.

We live in a scientific and technological era, which you are, of course, aware of. Therefore, when we talk about research, we are really talking about everything. Our health, of course, but also our industrial leadership, our productivity, our security, our sense of progress, our pride, and our welfare.

In this age, these are all dependent upon the nurturing of scientific vitality in all areas. The stable support of research endeavors and education are, therefore, not some abstract game for a few people to play, but are the foundation and source of the Nation's strength. We won't need to lose a war if we do not realize this, we will destroy ourselves.

How can we effectively transmit this message to all who are concerned?

There are several important facts that need to be made visible:

I have in my written report, Mr. Chairman, as these gentlemen have reported, listed a number of scientific advances. I should like to call your attention, however, to the cancer letter of April 9, in which it points out that already four cancer centers, whose renewals were awarded, received 95 percent of the peer review recommended funding levels. However, in the next cycle, seven centers, of which we were one, have been told that for now they should count only on receiving a small increase over their current level.

When one thinks that since about 1974 or 1975, the increase in the value of real dollars, we are below that level in real dollars. So we need to be concerned about this, and I am sure that you are.

We have several specific recommendations that are, generally speaking, in agreement with my colleagues. Although we also support the bypass budget of $1.46 billion, the current studies made at the request of some of our members indicate that the $1.3 billion really won't do it. Discussions with the private sector indicate that they can't either.

Also we believe that the cancer center support grant should be fully funded at the recommended levels. Since the sciences are all so greatly interdependent, we, therefore, strongly endorse the recommendation that Dr. Owens has stated of the ad hoc committee for biomedical research, and $5.6 billion should be made available to the NIH as a whole.

That briefly, Mr. Chairman, is a summary of our comments. Thank you very much.

Senator WEICKER. First of all, let me indicate or give you an update on the progress in these matters. Dr. Owens pointed out the matter in his testimony of the grants. I am in negotiation now with the administration and the Republican leadership in the Senate on this very matter. At this juncture, with no definitive agreement having been arrived at, it would be my hope, and I think that it is a realistic hope in terms of preliminary negotiations, that we will be able to sustain the 6,000 level as far as the grants are concerned, which at least shows that we have made progress compared to where it was. In other words, we are not going back to the 5,500 level as was the want of the administration, and it looks like we will be able to preserve the 6,000, which is not bad under the circumstances.

Additionally, I have gotten about two-thirds of the way home on moneys requested in the health line. These things should be finalized today. I think that before it is all over with, we should have something very positive to report in terms of additional money going to NIH, health professions training, maternal and child health care, geriatric training.

In any event, the way that it is handled by the budget process, even though I arrive at a dollar figure, emphasizing certain component parts, still the matter of where the dollars go is always a decision of the subcommittee and the Appropriations Committee. So I can only say that up to this point, things are looking better. In other words, the administration's package on health will be altered considerably upward.

I am glad you made the point, Dr. Murphy, on the matter of the economic drain. Again, this is something that the public forgets. If you want to talk about balancing budgets, the real way to balance budgets is to go ahead and put into place spending which either brings money back, or eliminates the problem at the source, if you will, to where the money doesn't have to be spent at all.

It is so darn difficult to get that concept across to the American people, this complex idea, but it is true. If we could go ahead and eliminate two or three of these killers and cripplers, in whatever form, the money saved to the U.S. Government would be multimillions of dollars. Cancer, Alzheimer's, arthritis, we need a checklist as to what the economic costs are to the Nation.

Dr. MURPHY. I think that it is a realistic hope, Senator, because we talk about chronic disease, and cancer is the one chronic disease that is being cured today. We are increasing our cure rates in a very tangible manner.

Senator WEICKER. There is no question about it. I was listening to a radio program the other day, coming in to work, and they were citing the changes relative to the fatalities in leukemia. It is absolutely spectacular.

Dr. OWENS. Senator, just think a little bit into the near future, as we learn more and more about the genes that result in cancer, abnormal functioning or inappropriate functioning of them. As you begin to understand how you control those things, it is not at all unreasonable to think that in the very near future we can figure out, before people have clinical cancer, that they are on that road, and are able to intervene at that juncture, before they become ill. So you can think of the consequences of that in terms of expenses. In addition to saving expenses, these are going to be productive people. I think there is that side to be considered also.

Senator WEICKER. When I was 8, 9, or 10 years old, I remember losing several childhood friends to leukemia. That was just considered automatic that a child suffering from leukemia would die. What is it now, about 90 percent or somewhere in those high levels for survival?

I get back to the point that Dr. Talbot made in his testimony, along with all the rest of yours, let's face it, these breakthroughs that are occurring today are the results of investments made 10 and 15 years ago. So it is very easy for our generation, I suppose, very easy for our budget cutters, to cut the budget and show a bottom line result and say: We have gone ahead and reduced the budget. They will long be off the stage when the results of their noncommitment is felt, which is, that is, there won't be any breakthroughs in the future.

Dr. OWENS. That is right.

Senator WEICKER. I think that it is important to point out that what we are benefitting from today is not as a result of Lowell Weicker, Ronald Reagan, Arlen Specter, or anybody who is around here, but rather the commitments that were made quite a way back.

Dr. OWENS. We are talking about disease processes that are going to involve 1 out of every 3 Americans that are being born, so it is not an insignificant problem.

Senator WEICKER. I can assure you that I think there is going to be—it is a horrible thing for me to say that there is going to be a good news message out of all of this in the sense that we will have effectively increased the funding beyond that proposed by the administration. But I have to confess to you right now, at least in my business, whether it is the business of politics or the business of sports, I never thought of a draw as a victory. That is really the tragedy of it. I am going to tell you right now, we ought to be spending even more than what I have requested, and the administration has requested. It is really such a small drop in the bucket. I am not talking about welfare programs. We are not talking about money down a rathole. We are talking about enormously productive investments.

The other thing, I wish the American Cancer Institute, the Heart Institute, and the rest of those that are represented here—we all sit there and attend the funerals of our friends who have died from one thing or another. We are all hurt. We are all mad. Yet, given the opportunity to do anything about it, everybody seems to be rather quiet out there in the public.

If you want to get mad, do something about it. See to it that our national policy in the health and science is one that you can at least say to yourself: I have done everything possible to avoid this particular moment.

Dr. TALBOT. There is a touch of the evangelist in all of us in this field, Senator.

Dr. OWENS. I think the basic support is the same. In fact, I can be interchangeable with Dr. Durant. Dr. Durant, perhaps, symbolizes the singular purpose of our various organizations. The coalition is a newly formed group, as you perhaps know, of the Lasker Foundation, the American Association for Cancer Research, American Society for Clinical Oncology, and a number of others, who have come together to try to support the things that you and your committee are doing.

Diane Kaneb, who has come from Boston, is a member of the coalition.

Senator WEICKER. Good morning.

STATEMENT OF DIANE KANEB, THE NATIONAL COALITION FOR CANCER RESEARCH

Ms. KANEB. I represent the private citizens, those who have been affected by cancer, and those of us like myself who have never had any immediate contact with cancer. I think my emphasis is on the continued funding of geographic cancer centers.

Senator SPECTER. Mr. Chairman, I wonder if I might say a word.

Senator WEICKER. Of course, you can.

Senator Specter has joined us here.

Senator SPECTER. Let me say just a word because we are about to meet on the judiciary, which takes up Conrail this morning, and I have to be there.

I would just like to say, Mr. Chairman, that I commend and thank you for your leadership on this subcommittee. Last year, the 98th Congress, for the first time, there was an appropriations bill on Labor-Health and Human Services under Senator Weicker's leadership, and he is continuing to provide that in a very meaningful way as he summarized here this morning. He has support on this subcommittee, which numbers my own vote, on many of these critical matters.

I especially want to commend the panel here today, and to note with some pride that Pennsylvanians are standing with Dr. Talbot in his capacity as former president and chairman of the American Association of Cancer Institutes. He is president emeritus of the Fox Chase Cancer Center, which is an outstanding institution in Philadelphia, where the efforts spoken of by the men and women on this panel today were taken certainly merit the support which you have articulated, Mr. Chairman.

Senator WEICKER. Thank you.

There is no question about the fact that Senator Specter has been a strong right arm to the chairman in what has been a very sustained and prolonged fight to maintain our commitments to science in all of its respects. It could not have been done without Arlen, it is as simple as that. I thank you very much.

Dr. TALBOT. I appreciate your comments, Senator.

Senator SPECTER. Nice to have you here. It is nice to have all of you here.

Senator WEICKER. Diane, why don't you proceed.

Ms. KANEB. My name is Diane Kaneb and I, as a private citizen along with Mary Lasker, strongly support the emphasis Dr. Owens and Dr. Durant have outlined in their statement.

My message is a personal one. Although no one in my family has cancer, 3 out of every 4 families in this country do. Also, I have been a long-time volunteer in a hospice program and I have often seen the impact of cancer on patients and families.

While we sit here and work throughout 1985, 910,000 people in the United States alone will be diagnosed as having cancer. That is the bad news. The good news is that we have come a long way and we are making great progress.

Today, there is a 50-percent survival rate for cancer patients who were diagnosed between 1976 and 1981. This compares with a survival rate of 38 percent in 1963. Also, since 1963, the survival rate for children has leaped from 28 to 68 percent.

Much of the improvement in cancer survival rates is linked to the use of cancer therapies in combination with surgery, radiation, and chemotherapy being used together or in some combination, rather than exclusive reliance on one single treatment approach.

Clinical cooperative groups are also a unique mechanism which supports clinical cancer research in this country. Over 5,000 physicians participate in the cooperative groups program which is responsible for the testing of new anticancer treatments, such as new anticancer drugs, new biological approaches to cancer treatment, surgical studies.

If adequately funded, this program, as well as the Community Clinical Oncology Program, can involve even more community physicians and their patients, bringing the latest cancer treatment options closer to the local community.

Cancer prevention has now entered a new era of expertise and knowledge. Scientific opportunities now exist that were unheard of years ago. However, many years of investment are still needed to observe the impact of progress initiated in cancer prevention. Important initiatives in smoking cessation and dietary modification activities have started and must continue to be supported.

Cancer centers are key to continued advances in cancer research, treatment, and prevention in this country. Cancer centers are a vital resource for further reducing cancer mortality by serving as major geographic centers for state-of-the-art cancer treatment and prevention activities. More cancer centers are needed, instrumentation and construction, especially for underserved geographic regions and underserved patient populations.

Today, I can speak of survival rates of 86 percent for testes cancer, 74 percent for breast cancer, 80 percent for skin, 93 percent for thyroid, unheard of success rates and success stories only 10 to 15 years ago.

In summary, all areas of cancer programs reflect the Nation's investment in the National Cancer Program. Words cannot express the importance of your continued support. Six thousand grants in 1985, as you mentioned, is a deep growth. We would urge you to continue the growth in 1986, and not stagnate at 6,000.

Thank you.

Senator WEICKER. Thank you very much. We appreciate your testimony.

The last comment relating to the statistics shows the necessity for broad research and many efforts in many different places. I remember when we started off with the authorizing act, the National Cancer Act, I would say that the national mentality was that we are going to find one pill, one cure, and take out cancer. I think what we have come to realize now is that it is very diverse and complex over many areas, and there is not one answer, but there will be an answer.

Even now, as we get into other matters, we find the work that is being done in cancer relates to other matters such as AIDS, et cetera. A lot of time, I know my colleagues sneer at general research that goes on. Everybody likes to feel that there is just one road to go down, and at the end of that road is the answer. It doesn't work that way scientifically, I don't think.

Dr. TALBOT. We salute you, Senator.

Senator WEICKER. Thank you all very much.

I have questions for submission to the record, Dr. Talbot, from Senator Specter, to which he would like to have you respond, which I think would be of help to the committee. If you could, I would greatly appreciate it.

Dr. TALBOT. Certainly.

[CLERK'S NOTE.—No response to date.]

PREPARED STATEMENTS

Senator WEICKER. Thank you all for your testimony. Your statements will be included in the record at this point, along with other statements submitted for the record on appropriations for the National Cancer Institute.

[The statements follow:]

STATEMENT OF DIANE E. KANEB

Mr. Chairman, members of the Committee, thank you for the opportunity to testify on behalf of funding for medical research programs, especially cancer research.

I am Dr. Albert Owens, Director of the Johns Hopkins Oncology Center in Baltimore. Officially, I am here with Diane Kaneb from Boston to testify on behalf of the newly formed Coalition for Cancer Research.

Our group is composed of the major medical and lay oriented groups in the United States - - the list of members follows our comments.

In summary, for fiscal year 1986, we strongly support a stabilized and increased program for cancer and medical research. This includes 6,500 grants for the NIH as a whole, continued emphasis on training, clinical trials and community outreach on treatment and prevention programs.

As an important backdrop, we also support your efforts to maintain the 1985 Public Law funded level of 6,500 grants for NIH. We view the President's effort to reduce grants to 5,000 - - fully 10% below the 5,500 level of 1984 as a great step backward. His recommendation is totally counter-productive to the progress and impetus the Congress and your committee has provided medical research in this country over the past three years. Your efforts have been one of the few bright spots. Medical research and training cannot be turned on and off like a switch.

The constant nurturing of the scientific enterprise takes years - - but there are dramatic results in the end.

From a cost saving standpoint, for every dollar we spend on medical research, $13-$16 are saved in wages lost, benefits, and care. That however is pale in comparison to the joy of saving a child from leukemia; eliminating the fear of breast cancer in women; or reducing the likelihood of prostrate cancer in men as they grow older.

These programs and many more are ignited by the National Cancer Institute. The war on cancer has been a costly one, but tremendous progress has been made.

We now understand the cancer causing process. This gives us an unprecedented understanding of cancer and is leading us to new forms of treatment, such as vaccines, in the effort to control cancer.

Cancer is, simply put, the uncontrolled growth of cells - - something fails to shut off growth.

Cancer cell growth is probably controlled by a group of genes, referred to as oncogenes. In the cancer process, these genes appear to be turned on due to a variety of causes, such as relocation to different sites on our chromosomes, viruses, radiation or chemicals.

This is a very exciting time for cancer research. With our recent discoveries as well as improved treatment and community efforts, we are on the brink of some exciting happenings.

As an example, NCI supported research recently found that some oncogene products are directly related to factors that are known to switch on the unrestricted growth of cells. It is usually these metastatic cells as they are called, which invade and crowd out normal tissues in vital organs such as the brain, liver, lungs that are the major cause of death - - - not the tumor itself. This is rarely understood. It is essential to find a way to block this type of cell growth.

We now have specific genes associated with the process and for the first time a model system - - and thus, or first handle to study ways of interfering, stopping or even reversing the uncontrolled growth of such cells.

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- -

My name is Diane Kaneb and I, like other private citizens along with Mary Lasker, strongly support the emphasis Dr. Owens has discussed.

My message is a personal one - - although no one in my family has cancer, 3 out of every 4 families in this country does. Also, I have been a long-time volunteer in a hospice program and I have often seen the impact of cancer on patients and family.

While we sit here and work throughout 1985, 910,000 people in the United States alone will be diagnosed as having cancer.

That's the bad news. The good news is that we have come a very long way and are making great progress.

Today there is a 50% survival rate for cancer patients who were diagnosed between 1976 and 1981. This compares with a survival rate of 38% in 1963. Also, since 1963, the survival rate for children has leaped from 28% to 68%.

Much of the improvement in cancer survival rates is linked to the use of cancer therapies in combination, such as surgery, radiation, and chemotherapy being used together or in some combination rather than exclusive reliance on one single treatment approach.

Clinical Cooperative Groups are also a unique mechanism which support clinical cancer research in this country. Over 5,000 physicians participate in the Cooperative Groups program which is responsible for the testing of new anticancer treatments, such as drugs, new types of treatment and surgical studies. If adequately funded, this program, as well as the

Community Clinical Oncology Program can involve even more community physicians and their patients,bringing the latest cancer treatment options closer to the local community.

Cancer prevention has now entered a new era of expertise and knowledge. Scientific opportunities now exist that were unheard of years ago. However, many years of investment are still needed to observe the impact of progress initiated in cancer prevention. Important initiatives in smoking cessation and dietary modification activities have started and must continue to be supported.

Cancer Centers are key to continued advances in cancer research, treatment and prevention in this country. Cancer centers are a vital resource for further reducing cancer mortality by serving as major geographic centers for state-of-the-art cancer treatment and prevention activities. More cancer centers are needed, instrumentation and construction, especially for under served geographic regions and under served patient populations.

Today we can speak of survival rates of 86% for Testes cancer, 74% for breast cancer, 80% for skin, 93% for thyroid, unheard of success rates and success stories only 10-15 years ago.

In summary, all areas of cancer programs reflect the Nation's investment in the National Cancer Program.

Words cannot express the importance of your continued support.

Thank-you . . . .

THE NATIONAL COALITION FOR CANCER RESEARCH

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Mrs. Albert D. Lasker

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STATEMENT OF SAMUEL B. WALLACE, MEDICAL RESEARCHER AND HEALTH CARE PRACTITIONER

The need for a more scientifically effective Cancer Therapy is clearly indicated by the results of a Cancer Trial sponsored by the National Cancer Institute in this country in the recently completed studies of the 20 participating Cancer Institutes over a ten year period comparing a total mastectomy (removal of all breast tissue and tumor) with a lumpectomy (the partial removal of breast tissue and total removal of tumor coupled with radiation and some chemotherapy. 1/ A similar study with similar results was also reported in Milan, Italy. 2/

Far more favorable results in Cancer Therapy have been reported and documented in studies using more scientific methods and better chemotherapy protocols that were reported in France by the European Organization for Research in the Treatment of Cancer in a 1,000 case study with a 64% cure rate and a mortality rate of 12% to 17% using multiple modality and routes of chemotherapy using Antitumor Agents and such remedies as Ticaracillin a Penicillin derivative for accompanying febrile manifestations. 3/(I think here a followup would be in order just in case this multiple therapy proves to be more effective than the toxic antitumor agents used alone.)

Better results were reported by Cancer Therapists in Japan in treating Non-Small Lung Carcinoma by infusion which used a combined chemotherapy modality which included Cisplatin,Adriamycin,Cyclophosphamide and Radiation. 4/ This treatment produced a cure rate of 72% for Lung Cancer. (The cure rate for Lung Cancer in this country is less than 20%.) The therapists in treating Lung Cancer used adequate quantities of Antibiotic agents and also injected large quantities of Antibiotic directly into the Cancer Tumor and areas surrounding the Tumor. Therefore, the therapy used was both local and systemic.

Dr. Mueller of Hamilton Ontario, Canada commenting on the two American studies for Lumpectomy and Mastectomy in the same issue of the New England Journal of Medicine March 14,1985(where those studies were also reported), emphasized a very important medical fact that 5a/ when the Cancer Patient's Lymph Nodes were infected that the Cancer almost invariably proved to be fatal. 5/

I would like to call the Committee's attention to the fact that the form of Cancer Therapy that I proposed to the House Select Committee on Cancer Research chaired by Chairman Pepper in 1979 and suggested again to both the House and Senate Committee's on Appropriation in 1984 were very similar in the form to treatment and the type of Antibiotics suggested for the Lung Cancer and Breast Cancer Studies conducted in France and Japan that have thus far proved to be more successful than the ten year study conducted by the National Cancer Institute of this country. For the most part, the actual treatment that I recommended was safer in that it relied more heavily on the common Antibiotics which when combined with an epinephrine derivative are far more effective even against viral illnesses. (See Testimony of Samuel B. Wallace, Subcommittee on Health 1975-Hearing on National Health Insurance). The treatment that I had recommended to Congressional Committees and the National Cancer Institute in several successive years also treated the Cancer Infection Locally- the immediate regions and area of infection and Systemically- all the Immune Systems which were potential or actual remote areas of the Cancer Infection. Thus, when the lymph nodes were infected Antibiotics would be injected or infused in sufficient quantities both in the area of the infection-the lymph nodes and also in the various Immune system gateways-orally, nasally, intravenuously and even in the bone marrow also.

I would like to emphasize to this Committee, the Medical Community and the American people the fact that applying the Antibiotic (penicillin or tetracycline combined with the synthetic epinephrine either Phenylephrine Hcl or Naphazoline Hcl in 1% solution) as Nose Drops three times per day over a period of at least several months is essential in Cancer Treatment. And the reason why this formula should prove so effective is because the Lung Immune System which is treated by this treatment is also linked to all the other Immune Systems in the human body directly through the blood cirulatory system and through the lymphatic glandular systems whose primary situ is the Lungs and indirectly through capillary exchange of those systems extended.

It was reported in the American Journal of Surgery V.148,Sept.'84 by Doctor Merrill etc. of Chicago that in cases of advanced stage head and neck Cancer that their studies and those of others indicated that the response rate to Cancer Therapy improved when Antibiotic Adjuvant Therapy was given before radiation or surgery on p.367. These studies also indicated that complete and partial responses occurred in 14 of 19 patients (74%) after chemotherapy and that none of their patients had progressive diseases while receiving chemotherapy. They also admitted, however, that using using local therapy that no drug prolonged survival beyond 17% after surgery. They also acknowledged that in many cases of advanced head and neck cancer that they found difficulty in applying the drugs "sytematically" because of "lack of clinical proof" of the "measureable existence of the disease."(To me metastatic effects of this disease should have been sufficient reasons to treat Cancer SYSTEMICALLY.)

Concurrent with this study have been a number of studies on Cancer metastasis in animals and humans 6/ that may shed some light on the problems and troubling questions concerning the direction of Cancer Reseach being taken by the National Cancer Institute's Study on Mastectomy and Lumpectomy and the rather time consuming searches for a Cancer Vaccine Combination.

Two independent studies of experiments in Cancer metastasis in animals indicated that the tumors that metastacized were produced by a process of selection of tumor cells that were metastatic over a very long period of time. 7/ 8 /. It was shown that tumor cells derived from parent tumor cells were more metastatic than were the parent cells. And further, that the minor subpopulations of Cancer Cells in Vaccines that did not stimulate the immune system after vaccination due to their small ratio in relation to immune cells and antibody actually continued to multiply and in time actually dominated the host. 9 /.

The animal study of Dr. Kim on Cancer metastasis is the most interesting in that it shows a "Pattern of Mestastasis 7/p.339,indicating that the tumors generally metastacized by either the blood system route or by means of the lymphatic glandular route that both extend throughout the body. Thus, the primary Cancer sheds some of its cells into the tissue or into the blood and the Cancer cells that are not destroyed by phagocytes, killer cells, blood serum complement or Antitumor agents enter either the lymphatic systems passing through or lodging in the lymph nodes or through the blood systems passing through the veins or arteries through the various organs and glands that are on those two routes of circulation or else they lodge in the glands, organs or other tissue or in some cases the bone marrow. The results of this study by Dr. Kim would also suggest that applying Antibiotic medicines to those potential routes of Cancer metastasis by applying the Antibiotic directly to the area of the cancer infection and then to all the immune systems and also nasally which also goes to all the Immune Systems would be more effective in preventing Cancer Metastasis.

Dr. Carr in Cancer Metastasis Review V.2,p.307 states that his test on animals and other research show that local chemotherapy can free Lymph Node Cells of Cancer Infection. usually by injection of chemical agents in liposomes. He also pointed out that tumor cell heterogeneity is of importance in many aspects of Cancer Metastasis. It is very noteworthy that his studies on Cancerous lymph nodes actually show the workings of the basic components of the Immune System. Thus, the tumor cells interreacte with Immune Hormones which cause inflamatory stimuli in infected drainage areas, B Cell response to antigen causes enlargement of surrounding lymphoid follicles, while T Cell response causes an increase of the T Cell inner paracortical [(arterial (T Cell)) area and Blood Serum Complement activated by antigen-antibody response increase the number of sinus macraphages, etc. Dr. Carr also found that direct intralymphatic injection of 5-fluorouracil (p.312) Antibiotic has proved effective in ridding Lymph Nodes of Cancer, but that treatment alone did not cure Cancer in other parts of the host's body. It is thus clear that neither Local Therapy nor Systemic Therapy alone is sufficient, but that in curing Cancer both treatments must be used together.

Systemic Therapy in reality means treatment of all the Immune Routes of Cancer which can be treated: Orally applying Antibiotics which treats the GUT Immune System, Nasally with Antibiotic Nose Drops which means treating the Lung Immune Immune System, Intravenously which means treating the arterial-venular system with Antibiotics. Nasal treatment of the Lung Immune System with Antibiotics in synthetic epinephrine solution is the only treatment that treats both the blood systems and lymphatic systems directly as well as all the glandular immune systems and even passes the blood brain barrier. Treatment locally of the area of Cancer Infection which could be called regional treatment as well as the immediate area of the Cancer Infection is of course obvious. Thus, in Breast Cancer Therapy not only should the Cancer Tumor itself be treated with Antibiotics but also that tissue that surrounds the Cancer Tumor which is almost invariably also infected with Cancer Cells. With regard to Systemic Therapy, my own studies indicate that treatment with Antibiotics using different routes enters the patient's Immune Systems at varying rates and does produce different effects. /12/ Cancer Treatment of the Immune Systems should take into account the treatment of both the B Cell and T Cell Immune Systems etc. /2/ as well as treatment of Blood Serum Complement etc. which can be activated by synthetic epinephrine hormone combined with Antibiotic plus the patient's existing antigen. (See Sunderland and Rapp on Complement.) Thus, I would suggest that Dr. Kim's, Dr. Carr's and research studies done in Japan and France as well as Dr. Umezawa's Research 13 clearly indicate that the approach to Cancer Therapy that I suggested to the Select Committee on Cancer Research in 1979 and again to this Committee in 1984 is indeed a safe and effective form of Cancer Antibiotic Chemotherapy which when used in its entirety would prove more effective than any other form of Cancer Therapy yet devised. And that the results of such therapy are decirnable within three months which is usually ample time to determine whether alternative more severe methods such as radiation or surgery should be necessary.

Dr. Talmadge concurs with Dr. Carr's conclusions concerning Cancer Cell and Tumor heterogeneity and he indicates that there is solid evidence that suggests contravening use of tumor vaccines in cancer treatment because some vaccines that have been tested while curing Some tumors produced the interesting effect of apparently causing others. /14/ Dr. Jern of Switzerland has indicated that there are over a trillion cells in the human body. Experience with influenza strains that annual variations occur make even the Influenza Vaccine of dubious value as a preventative Vaccine. Use of a vaccine produced from a single Cancer Cell which may in itself possess innumerable distinct variations does not appear as a practicable approach to preventing Cancer and certainly would not have much positive effect in curing existing Cancer Infections. It would therefore seem the wiser course to expend more resources in finding more effective Antibiotics capable of treating and Curing Cancer in the Cancer Patients today rather than relying on promises of finding a vaccine for its prevention in the future.

In 1975, before the Subcommittee on Health of the House Ways and Means Committee on National Health Insurance,[11] I proposed a new antibiotic treatment using FDA approved antibiotics for a wide range of bacterial and viral illnesses which was conposed of · a parasympathetic synthetic immune hormone which was similar to adrenalin or epinephrine combined in weak solution of 1/4 to 1 percent with two grams of penicillin or tetracycline Which was applied nasally as nose drops. I indicated that wide ranging tests on myself and others who were sick in Brazil indicated that this formula could cure a wide range of illnesses in a very short period of time using an extremely small quantity of Antibiotic. This formula cured respiratory illnesses such as the common cold in from one to three days, cured serious cases of pneumonia in three days, cured asthma with one treatment and generally reduced fevers within seconds after this medicine is applied. A fact that I have just now realized, is of great scientific importance which I hope to explain later in this paper.

In 1979, I submitted to the Select Committee on Cancer Research[15] a brief protocol for Leukemia, Lung Cancer and Breast Cancer based upon the fact that Cancer was a blood and glandular disease and not just a neoplasm. My proposed therapy which I formulated in 1970 in Brazil made use of FDA approved Antibiotics such as Penicillin and tetracycline and amplicillin combined with phenylephrine hcl in weak solution or naphazoline hcl in weak solution which was for all forms applied as nose drops for an extended period of time and which was also applied to the actual area of the cancer infection (even if this required surgery) and to the areas surrounding the infection which was particularly true in the case of breast cancer. I also suggested in that protocol that antibiotics should also be applied orally in sufficient dosages daily-(1.5gr to 2.grms.) and that Antibiotics should also be injected intravenously two times per week. Under such a protocol, the curative Antibiotics which can also be considered synthetic antibodies (see Dr. Umezawa's search for new Antibiotics on Micro-organisms)[16] were also applied to the known areas of the cancer infection and to those areas surrounding the infection even if that meant minor surgery as well as to all the Immune systemsi in which Cancer Could exist or spread. Thus, Antibiotics were applied to the Lung Immune System[17] and to those systems to which it is linked, Antibiotics were also applied orally (dry) to the GUT or Intestinal Immune System and Antibiotics were applied Intravenously so that a suffisient quantity of Antibiotics could, if possible reach the arterial system. The application of Antibiotic Nose Drops guaranteed that the medication reached the veinular system that drains the tissues through pulmonary arterial-venular capillary exchange, (see Dr. Leak in his chapter on Capillary Exchange in the Respiratory Defense Mechanisms Part II Edited by Joseph D. Brain.).

Thus this medication curative in nature reached all the Immune Systems that were actual or potential sites of the Cancer Infection and thus by these techni es the Cancer Therapists was enabled to cover all bases.

A SUGGESTED PROTOCOL FOR LEUKEMIA, BREAST CANCER AND LUNG CANCER

The First Principle of Cancer Therapy or any serious infection is to treat the area of Infection and those Immune Systems most closely related to thea area of the Infection normally with Antibiotics.

The following suggested Protocol for Leukemia, Breast Cancer and Lung Cancer uses FDA approved Antibiotics that have in the past been generally considered safe and effective against Bacterial and Viral Illnesses [12] I do not personally recommend the use of Adriamycin and ordinarily any one following this protocol in its entirety will seldom if ever have to use those therapies recommended for advance stages of Cancer. The protocol that I recommend has been tested as far as I know under the supervision of the patient's physician and as far as I know those indigiduals having Cancer have been successfully treated for Breast Cancer, Leukemia, and Osteomyletis. I do not recommend this treatment for osteomyletis because there are alternatives and my protocol was probablly used only with respect to the addition of Antibiotic Nose Drops. However, my treatment could be used and might prove successful provided strong antibiotics such as Penicillin plus phenylephrine hcl in solution were injected at both extremities of the Cancer infection in the bone marrow as well as the actual site of cancer infection. In any event, all treatments recommended are far better than their usual alternatives which includes massive surgery heavy dosage of radiation of severe chemotherapy with toxic or worse side effects. Dosages for Children can generally be halved according to normal weight schedules.

I have indicated that Antibiotic Nose Drops combined with Phenylephrine Hcl in !% solution except for Lung Cancer where 2% solution might be tested on a trial basis, except for Adriamycin where I recommend one ounze phenylephrine Hcl combined with 1 gr. Adriamycin which means that actually the dosage of Adriamycin applied per treatment is less than twenty miligrams per nose drop treatment. Injection into tumor sites can of course be closer to normal dosages. It should be noted that I also suggest combining phenylephrine hcl in solution with Antibiotics to be injected into areas surrounding and into the tumor infection area because phenylephrine hcl is synthetic epinephrine for all practical purposes and this synthetic parasympathetic hormone acts synergistically to release AMP an Enzyme compound that in turn acts intracellularly to produce intracellular and extracellular biochemical reactions. (This action is explained in any good Physiology or BiolChemical Textbook and is known with respect to complement activation by antigen-antibody response.) [15] [16] [17] [18]

SUGGESTED ANTIBIOTIC PROTOCOL FOR THE TREATMENT OF CANCER:

DISEASE	TREATMENT	DURATION AND FOLLOWUP
Lung Cancer Early Stage	Amplicillin 2gr. combined with 1% solution Phenylephrine HCl taken 4 times per day. Oral Capsuls 500 mg. Penicillin-Dioxcillin alternate 4 times (dry) per day. Penicillin Injected Intravenously 2 times per week.	12months (after 6 months once a day)
Lung Cancer Advanced Stage	Recommended 2 to 3 gr. Penicillin in 1% Sol. Phenylephrine 5 times per day. Always injections into area of the Cancer infection Penicillin 500 mg. Capsuls 4 times per day.	12 months (twice per day)

DISEASE	TREATMENT	DURATION AND FOLLOWUP
Breast Cancer: Injection of Dioxicillin-Amplicillin combination with Phenylephrine HCl in solution, 1st applied to area surrounding Cancer Infection and then into the Cancer Infection itself. In the case of Infected Lymph Nodes Minor surgery is sometimes required to apply the Antibiotic	Antibiotic Nose Drops Amplicillin-Tetracycline 2 gr. per ounze phenylephrinehcl applied as Nose Drops 4 times per day Amplicillin Capsuls 500mg 4 times per day taken orally (dry) Penicillin Injected Intravenously twice per week for 6 months.	12 Months (after 4 mo. once per day)
Leukemia	Antibiotic Nose Drops Amplicillin 2 gr. 4 times daily for six months Dioxicillin-Penicillin 500 mg. orally (dry) 3 times per day. Penicillin Injected intravenously once per week.	12 months after 1st six months once per day.

Earlier in my testimony for this day, I had indicated that the fact that the Antibiotic combined with phenylephrine hcl or naphazoline hcl, which are synthetic substitutes for adrenalin or epinephrine which is classified as a parasympathetic immune hormone, produced startling effects with respect to the reduction of fevers when applied as nose drops for severe fevers caused by a bacteria, virus or parasite.

The fact that a medical combination could reduce a fever within seconds of its application has never before been reported in Medical Literature to my knowledge and that fact combined with the short times of cure and the significantly smaller quantities of medicines used is in itself a major medical break through in terms of therapy for a wide range of illnesses some of which have previously been considered "incurable." But the fact that a medication applied as Nose Drops can reduce a severe fever to normal temperature is scientifically speaking of even greater significance and today I shall attempt to explain why.

Medical science today knows of no chemotherapy that begins to work instaneously in all parts of the human body in response to antigen-caused symptoms such as high fever. If the knowledge of such a treatment were available to the Cancer Therapist then he would be able to virtually guarantee the patient that by applying the Anticancer Medicines properly the Cancer Patient would be in most cases cured of his disease for good. The problem of Cancer Mestastasis would be largely solved because the Cancer Therapist using Drugs and other procedures where necessary and then using drugs again applied to all the actual and possible sites of Cancer Infection would be fairly well assured that the Cancer Patient's infection once cured would not in most instances reoccur or spread to even remote areas.

It is, however, known to medical science that epinephrine or its synthetic derivatives phenylephrine hcl and naphazoline hcl in weak solution have been known to reduce fevers, but not to level of normalcy.

It is also known to medical science that Antibiotics and other medication administered intravenously usually enter the entire blood circulatory system in about 30 minutes and that in the case of Antibiotic Capsuls the curative effect begins within several hours.

It is also fact that epinephrine is used often in emergency medicine to treat cardiac arrest by restoration of PH and electrostatic balance before the application of electric defibrillation. And it is known to science that epinephrine does act to stimulate metabolic activity of all the cells of the human body, but that epinephrine by itself is not known to have any curative properties such that a serious infection which cuases a severe fever can be so treated in the various parts of the patient's body that the patients temperature is reduced immediately upon proper application of epinephrine or its synthetic hormone equivalent. And it is a known fact that most medicines such as Antibiotics when administered directly to the seat of the infection itself usually require hours or minutes before a positive result occurs. It is also established fact that most immune reactions are generally sequential and seldom concurrent. For example, the infective agent is assimilated by the human body and becomes an antigen which allows it to interact with Immune Cells and Andtibodies. Then after a specific antibody-antigen reaction that reaction activates the blood Serum's complement to act non-specifically against both bacteria and virus in either the so called Classic complment pathway invovling the complement enzyme c1 to c9[21] in sequence or else by another process where many of the sequential[22] steps, but not all, are either eliminated or else act in concert. It is as I have just indicated in this paper a fact long known to science that complement activation in the human serum is of such great importance because complement acts non-specifically against virus and bacteria and thus is capable of handling a far larger quantity of Antigen[23] than the Antibody that is bound to only one antigen. (This fact is of especially great importance in the area of Cancer Therapy because Cancer is so very heterogeous even in singular cells). The fact that complement is non specific and can act in a concurses against a huge quantity of antigen much like an extended cloud layer can cover a wide area by its rain drops indicates the possibity that its sequential steps can in crisis situation act in concert which is not unknown to the human body in cases of stress or illness until homeostasis is restored.

It would therefore be safe to say that if there were any Immune response that involved the symptoms caused by a massive infection caused by a great mumber antigen acting in the cirmulatory system in many parts of the human body causing the symptom of the resulting high fever which was suddenly reduced by the application of Antibiotic (synthetic antibody) coupled to synthetic immune hormone (similar to epinephrine) that the possibility that activated complement was involved in that Immune Response would be exceedingly strong. (see Sutherland et al) [24]

I therefore must admit that it is not sufficient to say that because such a formula was applied in nose drop form did reduce viral fevers simply because a facilitated antibody antigen exchnage took place in the human body's principal immune organ the human lung immune system,[17, 25] but that the role of complement activation must be acknowledged in order to more accurately describe the events that led to the reduction in fever by immediate immune response to synthetic antibody and synthetic hormone.

Therefore, reduction in fevers due to the application of Antibiotics combined with epinephrine type synthetic hormones applied nasally to the Lung Immune System is only adequately explained when both the antibody-antigen reaction and the complement activation are considered as an immune response that takes place only in the Lung Immune System for serious and pervasive infections causing extremely high fevers.

While a full explanation of the chemical and biological processes of this antigen-antibody hormone and complement complete immune response in the Lung Immune System is beyond the scope of this paper, let it simply be said that Phenylephrine or Naphazoline Hcl in weak solution when combined with an Antibiotic such as Penicillicin or Tetracycline and applied as Nose Drops to the Lung Immune System acts as both a catalyst and as a prime mover in eliciting antibody-antigen and more importantly complement activation as an Immune Response in the Lung Immune System and these Intercellular biochemical interactions and relationships have been partially explained by (Sutherland et al in his description of Epinephrine's role in the formation of AMP and its action in intra cellular and extracellular interreactions in the Immune Response by way of analogy)

Therefore, the reduction of fever by means of this Antibiotic therapy applied to the Lung Immune System is of great importance not only to ordinary medical therapy where it is readily applicable for treating a wide range of illnesses with a very small quantities of Antibiotic properly applied effecting much shorter times of cure and more generous rates of cure, but this therapy is particularly important in both Medical Research and in treatment of a wide range of illnesses now considered incurable.. It is of great importance to Cancer Chemotherapy because not only does the antibiotics reach the venular and lymph systems of the human body, but also activated complement and, I suspect, reconstituted lymph also travel to those areas not readily accessible by ordinary application of medicines in the traditional routes.[26] For example, the Lung is also laced with lymphatic channels according to Professor Leak and the lymphatic capillaries also exchange antibody with the pulmonary cappillaries etc.. In any event, I think that great benefits will come from the application of my medical discoveries including, I believe, the benefit of preventing micromestastasis in both the blood system and lymph system in Cancer Patients provided that my therapy is used.

There is much competent medical authority to indicate that the application of medicine intranasally is sound. And this technique has recently been reported with respect to Antigens or Vaccines in the U.S.A., England, Canada, Isreal [27-28] and has been reported using a different formula plus an Antibiotic for the treatment of tuberculosis successfully in Russia. [29]

My medical formula has possible application for a wide range of alloallergic diseases such as Asthma, Arthoritis as well as a host of immunologically deficient caused diseases and various neurologic diseases many of which are now deemed incurable. Primarily through lack of the proper application of the Antibiotics in the proper manner to the area or areas of the infection and to the immune system or systems most closely related to the area of the infection.

Thus, the witness has given some indication of progress being made around the world in the treatment of Cancer using common and antitumor antibiotics in sufficient dosages in multiform and multiroute treatment. He has also noted that the effectiveness of his discovery is not just due to application of the antibiotic and synthetic epinephrine like

Immune hormone to the long immune system, the principal immune system in the human body,[17] because this formula catalytically and synergetically activates complement. He has also reiterated his claim to having found a more effective cure for pneumonia and an effective cure for asthma, but also in having found a medical treatment that would be useful in all forms of Systemic Cancer Treatment and which when applied in its entirety to the area of the Cancer Infections and to the Immune Systems most closely related to the areas of the Infection that it can be reasonably expected that Cancer in many instances will be cured without its reoccurrence or spread (mestastasis). The witness is somewhat embarassed that he has not been able to give a reasonable explanation for this formula's activity in curing asthma in one treatment. Although he suspects, it has something to do with his formula, the IgA Antibody common to the upper respiratory system and the formulas action on complement causing its activation.[3]

This project has entailed ten years work without pay and I would not be adverse to an in hand grant so that I could continue this work which medical science in other countries is already finding useful. I have also talked with several well known researchers in the medical sciences who have expressed interest in collaborating with me in Research in the area of Antibiotic Nasal Therapy, Anticancer Systemic and Local therapy, Research on complement in the immune response and in Cancer Therapy all of which promises to yield far more impressive results than Research on Interferon, Gene Splitting and Acylclovyr.

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STATEMENT OF GERTRUDE ENGEL, HEALTH ADVOCATE

We praise, appreciate and are grateful to Congressman William Goodling (R. Pa.) for introducing H.R. 1471 allowing non-toxic Laetrile for relief of pain concerning cancer victims under the care of a physician.

Dr. Frank Young, Commissioner of the Food and Drug Administration (FDA) tendered his approval to make this measure a federal law. The Honorable Judge Luther Bohanon, of the U.S. District Court for the Western District of Oklahoma, recently ruled to keep the affidavit system signed by a medical doctor intact.

We need your help and moral support.

Please write or call your Congressman to co-sponsor and support this legislation. Twenty-three states legalized the use of Laetrile. It is favored in Germany and numerous foreign regions.

President Ronald Reagan asserted, "I am for Laetrile, efficacy or not, freedom of choice. Tell the world." We did.

After fifteen years of my dedication, this tribute, is a glowing experience.

Thank you sincerely.

We love you.

We welcome the honor, privilege and opportunity for personal appearances. We assure you more essentials of this vital matter.

PHOTO FURNISHED GRATIS.

Respectfully submitted,

Gertrude E. Engel

Health Advocate

Judge Luther Bohanon, U. S. District Court for the Western District of Oklahoma, once again conducted hearings on the Laetrile controversy with great compassion and fearlessness.

The Honorable handsome judge is blessed with a calm and gracious manner with sympathy and goodness. He is sensitive to the terminally cancer victims' cry of pain and the seriousness of the disease.

He described with wonderful clearance and brevity that he was NOT responsible for past procedures of dissolving the rights to obtain Laetrile with the affidavit system signed by a physician.

The United States Court of Appeals for the Tenth Circuit in 1981 denied a petition to vacate any orders making available Laetrile to cancer victims. In 1984, a change of heart occurred and Judge Bohanon was asked to dismiss the former petition. Why?

It was then, the Food and Drug Administration issued a compassion plea stating, "All cancer victims using Laetrile in the past could still obtain the Laetrile, but no-no for new patients." Hence, it resulted in a re-negotation motion filed with the court.

In October 1978, I did the research for the brief amicus curiae which was placed on the docket of the Supreme Court of the United States. The Supreme Court did not ban Laetrile. In June, 1979, the Court in a 9 to 0 decision remanded the case back to the Appeals Court.

I remember Justice Thurgood Marshall's remark, "Should we sitting in a court of equity decide the fate of Laetrile?" The then solicitor general Wade McCree, who defended the FDA said, "I am wondering about that myself." Court adjourned.

Laetrile was described in the Journal of American Medicine as non-toxic and clinically safe. It provides substantial benefits to the patient, relieves excruiating pain and bestows a relative sense of well-being.

President Ronald Reagan told me in a face to face dialogue, "I am for Laetrile, efficacy or not - freedom of choice, tell the world." We did.

After four doctors testified, Bohanon ruled that the current affidavit system would remain intact. Objections offered by the Food and Drug Administration's attorney were overruled.

It was an honor and a privilege to talk with Judge Luther Bohanon after the hearings. The Judge agreed with the President. I showed him my outline of many factual assertions and features, which he asked me to submit in more elaborate detail.

Throughout the years my experience was to combat issues and fight for life. I constantly kept the Court notified and I am as happy as a lark today with the decision.

This never-ending issue reverberates in the courts since 1974. We were told that a loophole was found, again, the "grandfather clause" - this technicality was resolved to Judge Luther Bohanon's satisfaction in April, 1977. He created the "affidavit system" under the care of a doctor.

We humbly request, please, that any further litigation be withdrawn. Twenty-three states approved the use of Laetrile. I removed my sign "Weep no more my lady" and instead posted, "Expect a miracle, God is on your side."

My personal tragedy, "Thirty years is a long time to cry."

Thank you sincerely.
Respectfully submitted,
Gertrude Engel,
Gertrude Engel - Health Advocate

January 11, 1985

The Honorable Judge Luther Bohanon

Re: Amygdalin/Laetrile
Factual assertions

The following information is submitted, in accordance with your instructions, the day I visited the Court.

President Ronald Reagan said, "I am for Laetrile, efficacy or not - freedom of choice. Tell the world. We did. (Remarks included in press release)

24 States approved Laetrile (recently, Illinois bowed out) Health Department said, "It was done very quietly." The truth apparently will not be known.

U. S. Supreme Court - reported in the press release is self-explanatory.

New York State Legislature approved by unanimous vote to legalize Laetrile. The then Governor Hugh Carey vetoed the bill. A legislator suffering from cancer purchased his Laetrile through the black market. He did not have enough money to keep up this practice after a long time of survival. He was taken to the hospital - he called me in the afternoon and said, "The Governor lacked the milk of human kindness." That night the patient died.

I talked with Alicia Buttons on the telephone before I came to the Court. Alicia is the wife of Red Buttons, famous actor comedi They live in Los Angeles. She uses 500 milligrams of the Laetrile powder twice daily with pure bromelain. She rides her two horses engages in aerobics and trapeze activity. Her friend Beth Krieff had surgery and is doing likewise for the last 5 years. Both women admit Laetrile has furnished a sense of well-being and relief of pain. Alicia wanted me to tell you what Laetrile does for them.

Shah of Iran, Mohammad Reza Pahlavi - treated with Laetrile for a long period from the Pasteur Institute in Paris. It was kept a secret that he was a cancer patient. I knew him personally.

Dr. James Privitera, a remarkable West Covina physician, who helped many patients was sentenced to six months imprisonment for prescribing Laetrile. He never presented Laetrile as a cure for cancer but merely practiced and prescribed it as part of a nutritional program to help build up the bodies of people with degenerative diseases, in violation of law at that time in California. He did not sell it but told the patients where they could obtain the substance.

I was called upon to present my research. Judge David Gill dismissed all charges against Dr. Privitera after 55 days and Governor Jerry Brown granted him a full pardon. The lawyer in the case requested my assistance. I am told the fees amounted to $60,000. I did not receive any money - not even a red rose for courage or a white rose for purity. Judge Gill's secretary called and delivered the Judge's message. She said he was pleased with my testimony and wanted me to know what he did at two o'clock that afternoon. Needless to say that every fibre of my being glowed with appreciation.

An FDA spokesman, in an auditorium, filled with a capacity crowd, gave his speech against interferon as NO cure for cancer. My commentary was that Laetrile - while there is no cure for the disease - proved to be the answer for a sense of well-being. I commented, "The Japanese scientists declared the component Benzaldehyde was most beneficial." The FDA person called me a "murderer" in front of all those people. Several members in the audience rebuked him for his uncalled insulting remark.

The late Congressman Larry McDonald (D. Ga.) a physician said, "The right to determine the value of a product should be left to the patient and the doctor. Do you want a government bureaucracy treating your health needs, or your personal physician?"

Senator Jesse Helms (R. N.C.) claims the efficacy requirement has caused the American production of new drugs to fall from 43 a year before 1962 to 13 a year. Major drug breakthroughs enter the American market two to five years after widespread use in Europe. This "drug lag" Helms claims has resulted in untold deaths and suffering for thousands of Americans who cannot obtain medicine they need."

A Coroner's Office assistant in Los Angeles spoke with me and said, "A compulsory autopsy is performed on patients who return from Mexico but no deaths resulted from the use of Laetrile."

Colonel Dr. Richard Broskey, Walter Reed Medical Service chief. When it was discovered that he had cancer, he sought aid from Dr. Hans Nieper. He was treated for years with Laetrile. I knew him and his wife - visited in their home several times.

Dr. Charles Moertel, Mayo Clinic, reported satisfactory resulta from Laetrile, wherein the Appropriations Committee after my suggestion agreed to furnish the necessary funds for aresearch program admitting a certain number of patients. At the oncology meeting with 3000 members held in Washington, he promised me he would tell the truth. He changed his mind and addressed the group with a negative response. TV, radio and members of the media were stunned when I cried. TV stations featured me on television bursting in tears - because for one reason or another he decided to change his testimony. The White House was informed of this event.

Dr. Manual Navarro reports Laetrile used in the Phillipines (18 years) also, Italy, Japan, Mexico, East and West Germany, France and Israel. Note: Amicus Curiae with more detail, page 41.

Memorial Sloan-Kettering - A researcher working with patients and using Laetrile with satisfactory results was/almost forced to resign because of the institution's reluctance to mention the findings. Dr. Kanemasto Sugiura's results were contradicted.

50,000 to 75,000 patients are administered Laetrile in Canada. "Relief from pain and an improvement in well-being - positive benefits - reduce damage of harmful effects in chemotherapy and radiation.

Rutgers University research published in SCIENCE 1983 - "Laetrile the most powerful free radical hydroxyl scavenger and can be given at very high doses."

Dr. Dean Burk - Dean Burk Foundation, Inc., Pages 10 and 11 reviews controlled experiments shown definite Laetrile anti-cancer action. His booklet Vitamin B-17, a brief on Foods and Vitamins. See tremendous testimony in amicus curiae brief Now retired. Associated with National Cancer Institute - 35 years (Unusual credibility) and held in high esteem.

Arlin J. Brown - Information Center - A long time student on cancer and its causes, who has the books, articles and reprints with the effective and success of Laetrile. He publishes his Health Victory Bulletin every month.

My exclusive interview withmovie star Fred MacMurray - a cancer victim using Laetrile.

Reverend Thomas Munson, Clearwater, Florida - thankful that Florida Medical Board renewed faith in Laetrile. He claims it saved his life.

Karen Nygard came to Boston from Providence, Rhode Island where I was a speaker. She maintains that Laetrile was the answer to the excruiating pain her mother suffered from Cancer. She took her to Mexico and was grateful for the Laetrile treatments that eased her survival.

I have in my possession the certificate from the United States Patent Office shows registration Trade-Mark dated June 30, 1953.

Robert W. Henderson, P.D. needs your help. Attached is his original letter to me. He also quoted "Rypins" Medical Licensure Examinations - wherein it stated, "A number of the natural glucosides (the carbohydrate component is glucose)are important in medicine. An example is amygdalin/laetrile.

Dr. Hans Nieper, Please find attached a copy of my story which appeared in Let's Live Magazine, June, 1980. Most interesting.

From one who is especially grateful for kindness.
Eternal blessings and God's constant care for your health, happiness and humor.

Respectfully submitted,

Gertrude Engel
Gertrude Engel

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

STATEMENT OF DONALD S. GOLDMAN, PRESIDENT, THE NATIONAL HEMOPHILIA FOUNDATION

Senator WEICKER. Our next witness is Donald Goldman, president of the National Hemophilia Foundation.

Mr. Goldman.

Mr. GOLDMAN. Senator, good morning.

I am Donald S. Goldman. I am the president of the National Hemophilia Foundation. I am also a practicing attorney and I was born a hemophiliac.

The testimony that we have submitted, we appreciate the committee entering it into the record, is replete with data, statistics, and details as to the advances in biomedical research and comprehensive care with respect to AIDS. I refer to that and particularly to the recent OTA report on blood policy, which I think states, from an objective point of view in terms of the cost savings, the data that they accumulated and reviewed from the objective point of view of the OTA, rather than from merely an interested individual.

I would like, however, to let you know that the hemophiliacs in this country are quite appreciative of the work done by your committee, by yourself, by the Congress, in allowing the kind of care, which began in 1975, to continue.

You talked earlier about how it is the expenditures in the past that have brought forth the future benefits. This is one area where scientific advances have, in fact, come into actuality perhaps quicker than any other. Those kinds of advances can be seen. The support that you have provided has made a vital difference.

Myself, when I was a senior in high school, I missed 120 out of 180 days of school. My classmates knew me as the phantom because I was there less than I was absent. Back then, the only cure for the pain of internal bleeding into joints were all-night vigils by my rabbi, and 3 a.m. visits from the local physician with shots of morphine. Today, I am an active practicing trial attorney. I contribute not only to the foundation, but to society, serving on various committees of of the bar association, the Supreme Court of New Jersey, and probably pay more in taxes in 1 year than all of the kinds of assistance that I received through law school, high school, and, thereafter, in terms of the kind of Federal programs that you are talking about.

So you can see, in a very direct economic sense, forgetting even about the OTA document in terms of the Comprehensive Hemophilia Care Program, of the annual savings and the lower health care costs of approximately $93.7 million a year for a program. We are asking for an appropriation for fiscal year 1986, an increase from $3.5 million to $4.8 million.

The numbers are staggering. The numbers are clear in terms of the savings in health care costs. When you add to that what you are talking about in savings of economic costs, when you add to that what you are talking about in savings of pain and suffering, the equation is clear whether or not one is a fiscal conservative or otherwise. It doesn't make any difference.

The program for the comprehensive care centers is successful. It has been demonstrated to be successful. The reason for the increase that we request is to expand the coverage, to cover underserved populations, and to cover areas in the country that are not now served, not to increase the centers themselves that presently exist.

I would like to talk for a minute about AIDS. Hemophiliacs are the early warning system of this Nation's blood supply. We get more blood than probably anybody else from different sources, and if there is something wrong with the blood supply, it hits us first.

We will be asking for an emergency appropriation for AIDS education from the CDC for $150,000 for fiscal year 1985 supplement, and $200,000 for 1986. We will also be seeking an emergency appropriation for AIDS related problems. At the present time, we are developing figures, but there are tremendous psycho-social problems. The mother who is injecting the clotting factor into her son which is necessary to save his life, is also potentially injecting AIDS viruses as well. If you can imagine the psycho-social impact of that kind of a thing on a mother, and within families, it is quite substantial and needs care.

Last, I would like to congratulate you for your efforts and you recent amendment on biomedical research and sustain the level of effort for that, as well as CDC funding, and FDA funding, all of which are so necessary for our Nation's blood supply.

Thank you.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony. We will insert your submitted statement in the record at this point.

[The statement follows:]

STATEMENT OF DONALD S. GOLDMAN

I am Donald S. Goldman. I am the president of The National Hemophilia Foundation. I am also a practicing attorney and I was born with hemophilia. I am personally indebted to you. Without your support of the advances in biomedical research and comprehensive care I may not have been able to address you today. In 1968, the median age for people with hemophilia was 11 - since then it has doubled.

This is the 10 year anniversary of federal support for comprehensive hemophilia treatment centers. In celebration of this anniversary, The National Hemophilia Foundation has planned a special symposium on comprehensive care to be held at our 37th annual meeting in Houston, TX, 1985.

The Foundation is most grateful for the support that you have provided over the past decade for this program. As you are aware, this support has hastened a revolution in hemophilia treatment. Federal support of comprehensive care coupled with availability of plasma clotting factor concentrates have made home infusion therapy possible which has freed these patients from a life of hospital care and emergency room visits. There is no better example of the rapid translation of scientific advances into patient care.

A brief review of previous support for comprehensive hemophilia treatment and for hemophilia research will illustrate the progress that has been made.

COMPREHENSIVE CENTERS

In 1975, Congress established the comprehensive hemophilia diagnosis and treatment center program, providing direct federal funding to support the development of 24 comprehensive hemophilia centers and 60 affiliates (Section 1131 of P.L. 94-63). Under the leadership of Dr. Merle McPherson of the Division of Maternal and Child Health (DMCH), the network of centers has expanded and now provides a strong regional structure. Over 9500 hemophiliacs (nearly 50% of the total hemophilia population) are now served by these centers, providing multidisciplinary services including psychosocial, financial and vocational counselling, in addition to medical, dental and orthopedic care.

The impact of these programs has been dramatic.[1]:

- the number of patients seen at both primary treatment and affiliate center sites increased more than 124%;
- the number of patients in these regions receiving comprehensive care and the number on home care has nearly quadrupled;
- this has led to substantial reduction in the need for hospitalization so that the average number of hospital days per year per patient has been reduced by 80%; from 9.4 to 1.8;
- moreover, there has been a 70% reduction in the number of days lost from work or school each year; and
- the percent of unemployed adults dropped from 36% to 12.8% overall.

These important human benefits have been accomplished by a program that has also led to significant economic savings. Careful studies have documented a 62% reduction in total health costs per patient ($15,800 per year in 1975; $5,932 per year in 1981) for the 9,500 hemophiliacs enrolled in the federally subsidized comprehensive care centers.[2] This represents an annual savings of $93.7 million -- a savings that was achieved by a program that cost the federal government $2.9 million during FY 85. The $2.9 million federal support amounts to $305 per year per enrolled patient and there is an associated $9,868 saving each year that is due to this support.

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[1] See attached table and abstract.

There is no mystery as to how these savings are achieved - comprehensive care prevents complications of hemophilia that require costly hospitalizations[3]. In addition, comprehensive care prepares patients for home therapy so that patients do not need 25-50 hospital visits each year for bleeding episodes. Federal support has made comprehensive care possible for approximately half of the hemophiliacs in this country; I urge you to consider the additional savings that may be realized if increased funding permits comprehensive care programs for the thousands of hemophiliacs not currently enrolled.

Thus: Congress' investment in comprehensive care programs which promote home infusion therapy has paid off by reducing disability, unemployment and the cost of medical care for hemophilic patients.

THE FUTURE OF HEMOPHILIA TREATMENT CENTERS

In 1981, hemophilia treatment center funding was included in the Maternal and Child Health block grant as part of a special 15% set-aside of appropriated funds. At that time, federal support of the treatment centers was $3.3 million. Since 1981, treatment center funding fell below the $3.3 million. Last year, thanks to your support, the funding was increased to $3.5 million effective October 1, 1985. The total funds available to centers in 1985 will only be an increase of 6% over the total amount received in 1981. We are grateful that you supported this increase after you considered the needs we presented last year. This has allowed established services to be stabilized, but we are concerned that there are still 25 states that are not entirely covered by the regional federal treatment center network.

On November 28, 1983, an ad hoc Advisory Panel to the Division of Maternal and Child Health Hemophilia Centers Program was convened in Rockville, Maryland to develop a series of recommendations concerning future directions of this program. The report of this panel documented the need for increasing funding support to maintain these centers, expanding psychosocial services, improving coverage to underserved areas through regionalization, improving third party reimbursement for the treatment of hemophilia, as well as identifying 11 areas requiring targeted special efforts.

The success of the federally supported comprehensive hemophilia diagnosis and treatment center program was also documented in the January 1985 report of the Office of Technology Assessment entitled, "Blood Products and Technology." The report demonstrated that there are opportunities for improving health care for people with hemophilia by providing coverage for special comprehensive care programs and coverage for blood

[2] Maternal and Child Health, Technical Information Series, November, 1982, page 4.

[3] See attached table and abstract

products on an outpatient basis. The OTA report specifically noted the economic advances which have resulted from increased hemophilia comprehensive care services.[4]

AIDS: A SERIOUS PROBLEM THAT MAKES THE COMPREHENSIVE TREATMENT CENTERS EVEN MORE ESSENTIAL

Your Committee has heard much testimony about AIDS over the past three years. Of special concern to The National Hemophilia Foundation is that since July of 1982, there have been 73 cases of AIDS reported among children and adults with hemophilia, and 39 have died.

The recognition that AIDS is transmitted through blood products and clotting factor concentrates has had a profound effect on families affected by hemophilia across our entire country. These concentrates, which are the source of our newly found freedom from pain and disability, have changed overnight to a possible threat to our very survival. This crisis has created a need for comprehensive care that is greater than ever before. Last year, an informal sampling has revealed a 25% to 35% increase in patient encounters at many comprehensive care centers and this is specifically due to concern about AIDS. Again we thank you for establishing the hemophilia treatment centers program. These centers have served as anchors of support during this critical period - without them, there surely would have been widespread panic.

But now, the demand for psychosocial services is increasing more than ever before and will continue to do so in the immediate future because of the profound impact of data that has recently surfaced:

- nearly 3.7 out of every 1000 hemophiliacs have contracted AIDS;
- some studies have documented that over 90% of hemophiliacs are positive for antibody to the HTLV-III virus that is associated with causing AIDS; (antibody positivity does not constitute a diagnosis for AIDS)
- two wives of hemophiliacs have contracted AIDS;
- one child of a hemophilic man has contracted AIDS.

Just imagine the impact that this has on persons with hemophilia and their families. In the hemophilia community the specter of AIDS was originally confined to persons with hemophilia. Even though much of the data are preliminary and the potential of transmitting the disease is remote, there is serious concern about the ramifications of possible heterosexual transmission.

According to a study conducted by David Agle, MD of The National Hemophilia Foundation, many hemophiliacs are distressed and are at risk to develop psychological and social problems. Results showed hypochondriachal preoccupation, suspicion of blood products leading to non-compliance, possible disruption in the treater-patient relationship, and increased anxiety on the part of persons with hemophilia, parents and their wives. As mentioned above, the newly developed HTLV-III antibody test has demonstrated that the majority of hemophiliacs are antibody positive. This presents new and increased psychosocial problems for hemophiliacs. These new data represent advances in learning more about the disease, but they also have a profound effect on the nature of intimate family relationships. As a result of the increasing threat of AIDS, that is now expanding to entire families, the need for comprehensive care to be bolstered with increased psychosocial support requires prompt action.

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[4] See attached OTA citation.

On the whole, the hemophilia community is optimistic that a cure for AIDS will be found, because of the combined government efforts of CDC, DMCH, NIH and FDA in working with the treatment of hemophila and AIDS research. We applaud CDC's leadership and sensitivity, particularly that of Dr. Bruce L. Evatt, for helping us to identify scientific and treatment strategies to reduce the risk of AIDS transmission to people with hemophilia. The hemophilia community is grateful for these efforts and hopes they can be sustained and increased for the benefit of the hemophilia community and the entire country.

AIDS: WHAT MUST BE DONE

Despite the growing incidence of AIDS, its cause is not known and there are no accepted approaches to its control. As an obligatory recipient of blood products that have the potential for AIDS transmission, the hemophiliac has a special interest in efforts to understand and control AIDS. The National Hemophilia Foundation considers research in this area to be a matter of highest priority and we urge you to give this problem your most serious consideration. The recognition during the past two years that AIDS can be transmitted through blood transfusions, albeit very infrequently, emphasizes the widespread public health implications of this disease.

APPROPRIATIONS REQUEST

The issues that I have addressed can be translated into the following requests for appropriations:

1. FY86 Appropriations For Treatment Centers

We urge you to appropriate $4.8 million for FY86 to support the Hemophilia Treatment Centers Program. While this is a $1.3 million increase over the current funding level, it is essential if we are to adequately address the needs of 50% of the patients not now within the regional comprehensive care programs established by the DMCH. These funds would be used to expand the already existing regional network by establishing affiliates in areas not currently served. To assure the continuation of these programs, we request that you retain the 15% level for a set-aside within the DMCH appropriations, because it is more efficient to distribute resources for certain disorders on a regional and national basis rather than through block grants through states. The Hemophilia Treatment Center Program is clearly a special program of regional and national significance and is a model for other chronic diseases.

We also urge that MCH, of which the hemophilia program is a part, be funded at the full authorization level, as this is an investment in our nation's future.

2. Emergency Appropriations for Public, Patient and Provider Education

AIDS has caused considerable fear and confusion among patients, health professionals and the general public. There is a great need to provide accurate and timely information to help patients and their families cope with their fears. It is also most important that health providers have access to information and training to be prepared to work effectively with the duress of their patients. And because most hemophiliacs are HTLV-III positive it is of great importance that accurate information is provided so that there is not undue alarm in work, school and social environments.

To assist us to address these educational needs we are requesting $350,000 be appropriated to the Centers for Disease Control for this purpose.

Of this amount, we are requesting that $150,000 be made available through the FY85 supplemental appropriations that is being considered by this committee. This is needed to fund regional workshops throughout the U.S. to train health professionals to address the needs of their patients with respect to their fear of AIDS. The remaining $200,000 is needed for FY86 for the development of a regional support network and audio-visual materials to be used for public, patient and provider education.

3. Research

The success of comprehensive care and home infusion therapy might suggest that the "hemophilia problem" has been solved. Nothing could be further from the truth. Hemophilia is still an extremely painful and disabling disease. Clotting factor can effectively control bleeding but it is not a cure. And when CDC announced in July of 1982 that 3 hemophiliacs had contracted AIDS, it was again realized that as long as hemophiliacs depend upon a factor derived from human blood plasma, they will be vulnerable to anything that may contaminate blood products. In addition, clotting factor inhibitors de elops in over 10% of hemophilic patients and these antibodies seriously compromise subsequent care.

For these reasons, we are vitally concerned that there be adequate funding for basic biomedical research supported by the NIH, and especially the blood diseases and resources research program of NHLBI and the important research conducted by NIADDK.

We are grateful for Congressional support for increased AIDS related research. Continued and increased funding is needed in this area. The NIH, including NCI, NIAID, and NHLBI must receive sufficient funding to support a multifaceted research effort that will lead to a better understanding, control, and eventual cure for AIDS.

We realize that this subcommittee is faced with a very difficult decision concerning future research funding. In our opinion, there should be a strong commitment to biomedical research, and we hope that you will decide in favor of sustaining the level of awards.

Additionally, the Centers for Disease Control need increased funding so that they can expand their excellent laboratory investigations and epidemiologic studies and the FDA needs support to expand their surveillance of the safety of blood products.

4. Emergency Appropriations for Psychosocial Services

This year we will be making a very special emergency appropriations request, due to recent developments concerning the tragedy of AIDS. As cited earlier, recent reports indicate that the overwhelming majority of people with hemophilia are positive to the HTLV-III antibody (even though this does not constitute a diagnosis for AIDS), and the potential of disease transmission to family members has had a profound social and psychological impact on individuals and entire families.

These new data are already compromising relationships between husbands and wives, and may even lead to difficult choices such as postponing planned pregnancies. The risk of AIDS has created anxiety and enormous stress to the extent that data reveal that there has been a 20-30% reduction in the use of the clotting factor that hemophiliacs need to control their bleeding episodes. The risk of curtailing treatment is worse than the risk of AIDS itself because uncontrolled bleeding can lead to death and serious lifelong disabilities.

What a tragedy it would be if the fear of AIDS would revert us back two decades to the era of substantially increased bleeding caused deaths and severe joint damage. This necessitates an urgent response for psychosocial support services to those in dire need of your help. Therefore, we are now developing a careful analysis of these services that will include needed support for family and individual counselling as well as the training of health care providers. This analysis will focus on working through the established network of regionalized federally supported treatment centers. We will be bringing this information to you within the next two weeks to seek your guidance as to how significant support for these unanticipated urgent needs can best be accomplished in FY86.

SUMMARY

Over the last ten years we have been most pleased with the support you have provided for hemophilia research and treatment. The results of your investment in hemophilia research and treatment have been remarkable. But today, we are faced with very serious and difficult problems as a result of AIDS. Therefore we are asking you to help us find a way to secure more support for comprehensive care, research and for addressing the unique problems faced by the hemophilia community as a result of AIDS.

Thank you.

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The Benefits of Comprehensive Care of Hemophilia: A Five-Year Study of Outcomes

PETER S. SMITH, MD, PETER H. LEVINE, MD,
AND THE DIRECTORS OF ELEVEN PARTICIPATING HEMOPHILIA CENTERS*

Abstract: Eleven of 22 federally funded Comprehensive Hemophilia Centers have collected data on outcomes, before and after five years of this program's existence. Improved health, decreased hospitalization, decreased absenteeism, and a decrease in the unemployment rate from 36 per cent to 13 per cent were accompanied by decreased costs of care. In this model of a chronic handicapping illness, the early application of comprehensive care is preferable to the previous emphasis on end-stage rehabilitative efforts. (*Am J Public Health* 1984; 74:616–617.)

TABLE 1—Outcome Data in 11 of 22 Federally Funded Comprehensive Hemophilia Diagnostic and Treatment Centers

Outcome Data	Year before Program	Fifth Year of Program
No. patients seen at primary centers	1783	3705
No. patients seen at affiliate centers	329	1037
No. patients receiving regular comprehensive care	1333	4682
No. patients on self-infusion ("home care")	514	2001
Average days/year lost from work or school	14.5	4.3
Average hospital admission/year	1.9	0.26
Average days/year spent as inpatient	9.4	1.3
Per cent patients with third party coverage	74	93
Out-of-pocket expense/patient/year	$ 850*	$ 342
Overall costs of care/patient/year	$15,800*	$5,932
Per cent unemployed adults**	36	12.8

*These figures represent retrospective estimates from small samples, in the case of most of the centers.

**See Results section of text.

OFFICE OF TECHNOLOGY ASSESSMENT

Blood Policy and Technology (Washington, DC: U.S. Congress, Office of Technology Assessment, OTA-H-260, January 1985)

OTA on Medicare and Hemophilia:
"Opportunities exist for improving health care provisions for hemophiliacs, if not by creating a special program for them, then by providing coverage for blood products on an outpatient basis." (The OTA Report recommended expanded coverage for hemophiliacs, pointing out the inadequacies of Medicare which determines eligibility on a case-by-case basis; instead of by universal entitlement.)

OTA on Comprehensive Care and Hemophilia:
"The situation for hemophiliacs has improved dramatically since passage of Public Law 94-63 in 1975." (Federal upport of regional comprehensive hemophilia treatment centers.)

OTA on Cost Savings and Hemophilia:
"Compared to the year before the programs had started, the cost of total care, including rates of hospitalization, has been reduced, and unemployment among hemophiliacs is lower."

OTA on Other Economic Benefits and Hemophilia:
"The proportion of patients with third-party coverage has alos grown, both because employment of hemophiliacs increased as a result of better treatment, and because health care workers at the centers have helped patients arrange for coverage."

Senator WEICKER. Senator Chiles, do you have a question?

Senator CHILES. No; Mr. Chairman.

Senator WEICKER. Let me ask you one question before you leave here.

I have been wondering how the situation is vis-a-vis hemophiliacs. Is the AIDS problem as it relates to hemophiliacs any better than it was 1 year ago? Where does the situation stand?

Mr. GOLDMAN. There is good news, and there is bad news. The good news story, and it is going to sound macabre, is that there are only 75 hemophiliacs now who have gotten AIDS. There were some that predicted that maybe the entire hemophiliac population would be wiped out, so that in that sense it is good news.

The bad news is that it appears that virtually every hemophiliac has been exposed to the AIDS virus from recent HTLV-III testing, and no one knows what that means in the long run. No one knows what it means in terms of problems, in terms of communicability, that is to say, do I take the risk of communicating the AIDS virus to my wife in terms of our own sexual practices, or other hemophiliacs in terms of their own interfamily contacts. What are the medical, as well as the psycho-social consequences of that.

What appeared to be a bright star on the horizon in an active and productive life that many of us have been able to accomplish is certainly clouded by that spectre out there of AIDS. What it means in the future, I don't know. Clearly more research is necessary, and more assistance is necessary.

Senator WEICKER. Have the recent tests that I have read about vis-a-vis the giving of blood, and intercepting those that have the virus, been of assistance?

Mr. GOLDMAN. That is certainly going to be of assistance, but you have to understand that blood clotted today will be given to hemophiliacs 1 year from now. There is a time lag because of the fractination process that is done. Accordingly, while clearly the testing that is being done will make our Nation's blood supply safer, it does not eradicate the past contamination of it.

Senator WEICKER. Senator Chiles.

Senator CHILES. When you say, "every hemophiliac has probably been exposed," is there that much exposed blood out there?

Mr. GOLDMAN. The hemophiliac receives a thing called clotting factor. The clotting factor is derived through pools of plasma, some of which contains somewhere between 10,000, 15,000, 20,000 units of blood pooled together. Therefore, the data indicates that about 1 percent of the general population has the AIDS virus. If you take 1 percent of the population and a pool of 10,000, the likelihood is that at least 1 of those 10,000 is going to end up contaminating the pool.

Senator CHILES. You are satisfied that there is a test out there that we can check that contamination now, but we are worried about everything that has gone on before.

Mr. GOLDMAN. As far as that goes, the test is not perfect, but it is certainly an improvement. There are other things out there in terms of methods of treating clotting factor so as to attenuate whatever viruses are in there, and that situation certainly has improved. The test is a very rough test, and the accuracy of it is not entirely clear, but clearly, it is a better screen than what we had out there before. What we can try to achieve is the best screen that is scientifically available.

Again, biomedical research, which enabled the very rapid rate of approaching, of obtaining the kind of test—there is the blood supply, and it was Dr. Gallo at the National Cancer Institute who did a lot of research, and all of this research interrelates. Hemophiliacs, perhaps, are interested in the National Heart, Lung, and Blood Institute, but all of it interrelates. The research that is done in one institute relates to what is done in the other institute as well.

Senator CHILES. When you say, 75 was the good news, what sort of a percentage of hemophiliacs does the 75 represent?

Mr. GOLDMAN. There are approximately 20,000 hemophiliacs in the United States, 10,000 of which are severe hemophiliacs who receive very, very large amounts of clotting factor. Whether you want to take that 75 with a denominator of 10,000 or 20,000, you are still talking about a much too large number from my point of view, and unfortunately it continues to rise.

Senator CHILES. Any number is too large a number, but I was trying to get a handle on what we are talking about.

Mr. GOLDMAN. It is certainly a very big problem, and certainly the money that has been spent through the CDC and through the Office of Maternal and Child Health in terms of assisting it——

If the hemophiliac treatment centers had not existed at the time that this happened, there would have been chaos out there among the hemophilia rehabilitation and treatment community. Thank God that they existed. Thank God this Congress had the foresight 10 years ago to establish the program. It didn't have AIDS in mind, none of us did, but thank God that it existed because it has proven to be an unestimable aid to patients and physicians in terms of dealing with the situation as best we can today.

Senator CHILES. What can you tell me now about the general exposure of blood to AIDS disease in the blood banks that are around. Are we policing those properly now? Are they screening? Is the incidence coming down? Tell me before the test and after the test, about the screening of the person who is giving blood, who is walking around carrying AIDS.

Mr. GOLDMAN. I am not completely familiar with the data on the use of whole blood. However, I can tell you that the National Hemophilia Foundation has been actively involved, and I think I can say that the Department of Health and Human Services, and the Centers for Disease Control have been eminently helpful, as well as active and productive in terms of doing the best that can be done, given the state of technology, to try to safeguard our Nation's blood supply.

I don't think that any of us have anything to be ashamed of in terms of the efforts that have been made, and the recent testing of HTLV–III, antibody testing that will be available. I think that we will improve the situation. However, don't think that that is a true cure, and don't think that it is going to eliminate it. It will help to screen, but screens by their nature, as you know when you try to pass legislation, you try to find what you are looking for, but you know that you are only covering 90 percent of what you are trying to get at, there is still stuff that floats through that you don't tent over or close around. That is the way with medical research, and that is the way of life.

Senator CHILES. Thank you.

Senator WEICKER. Thank you very much.

STATEMENT OF VIVIAN GIORDANO, MEMBER, BOARD OF DIRECTORS, COOLEY'S ANEMIA FOUNDATION

PREPARED STATEMENT

Senator WEICKER. Our next witness is Vivian Giordano, member of the board of directors, Cooley's Anemia Foundation.

Ms. GIORDANO. Mr. Chairman, I know that you are busy, so I will just read the factsheet. Here is my testimony, if you would please print it out.

Senator WEICKER. It will be included in the record in its entirety.

[The statement follows:]

STATEMENT OF VIVIAN GIORDANO

Mr. Chairman, thank you for permitting me to testify for appropriations for research and care in Cooley's Anemia. I am Vivian Giordano, a member of the Legislative Committee of the Board of Directors of the Cooley's Anemia Foundation.

As this is the eighth year that we have appeared before this committee regarding Cooley's Anemia, we know that you are fully aware of the nature of the disease and its implications for patients. Nevertheless, attached to this testimony is a brochure explaining Cooley's Anemia and the work of the Cooley's Anemia Foundation.

We have a number of recommendations to make to the committee this year.

First, however, we would like to thank the committee for the bill report language that was inserted last year, primarily at the request of Senator Inouye of Hawaii. That language, from page 119 of the Senate Appropriations bill report for Labor-HHS-Education for fiscal year 1985, states:

> "The Committee has learned that, because of research advances and improved medical care, many patients with Cooley's Anemia are living longer, with improved quality of life. Along with these favorable advances, however, new problems have emerged. As patients are living past their teenage years, and into their twenties, many issues arise regarding the need for job training as well as educational, psychosocial rehabilitation counseling to remedy the loss of time from school and lack of extensive peer relationships resulting from the time lost in dealing with the disease. The Committee, therefore, directs that an interagency task force be established, which, in conjunction with the Cooley's Anemia Foundation, would survey such needs of patients, and develop a comprehensive report including an enumeration of those Federal, and federally aided State programs, which could be used in creating a directory useful to patients, families, and medical and other institutions which serve them. The report should include a model directory which can be made available for other disease entities in which youthful patients are living longer and requiring such services. The Committee believes that several departments and agencies should participate in this study and urges the Secretary to invite representatives from the Departments of Labor and Education to participate."

We are very pleased to report that we have been in continuous communication with the Maternal and Child Health Program, and recently, on March 11, they pulled together a task force to accomplish just what was proposed.

It is our understanding that the final report is due sometime in May, and we are also very pleased to report that just as the language required, the Maternal and Child Health Program involved the Cooley's Anemia Foundation in the development of this directory. We applaud the cooperation of the Maternal and Child Health Program in this regard.

As this committee may know, the Maternal and Child Health Program, under the 15% set-aside, has funded care programs for Cooley's Anemia in New York State, and also in New England, centered in the Boston area.

This 15% set-aside program has been invaluable in the care of Cooley's Anemia patients, and in the furthering of clinical research for the improvement of patient care.

Therefore, secondly, we recommend that the committee in its bill report language indicate that portions of the 15% set-aside shall be used to continue the program "of regional and national significance" in New York State and in New England.

Third, we recommend that the National Heart. Lung and Blood Institute be funded at $894 million for fiscal year 1986.

Fourth, we recommend that the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases be funded at the level of $637 million for fiscal year 1986.

Fifth, the bill report should stress that hematological research be carried on, as it is now, in a number of institutes. We are aware that there have been discussions among interest groups which have appeared before the various authorization and appropriations committees that all blood research be done in the National Heart, Lung and Blood Institute. While we have nothing but the highest regard for the NHLBI's work, it is nevertheless true that blood research takes place in the NIADDK (where much of the research regarding Cooley's Anemia is carried out), in the National Cancer Institute, and in other institutes as well. There is an additional problem that we would like the committee to be aware of: If all blood research were shifted to the National Heart, Lung and Blood Institute, not only would the programs have to be shifted, but the monies would have to be taken from all the other institutes and put into the NHLBI. The problem that exists there is quite simple, and that is that currently in the authorization (this authorization has existed since 1976), there is a 15% set-aside for blood research in that institute, and a 15% set-aside for lung research in that institute, with the rest being used for heart research. If the blood research were transferred to the National Heart, Lung and Blood Institute, we would then certainly find that the amount of funding for blood research would go up rapidly in that institute, and it would be much more than 15%, and this would cause considerable unhappiness on the part of the lung and heart communities. Additionally, researchers who now receive their funds from other institutes, and who work with peer review committees established apart from the NHLBI, would be disconcerted by changes of funding, because they are habituated to working with these institutes from which they have received funding over the years.

Sixth, we also support the Ad Hoc Group for Medical Research Funding's request for overall NIH funding of $5.7 billion for FY 1986.

Mr. Chairman, I would also like to comment now on the proposed Office of Management and Budget cutback from last year's appropriated level of 6,500 grants to 5,000.

While the number 6,500 might not be the "perfect number" of new grants, nevertheless it has indicated to the entire research community that Congress strongly supports the National Institutes of Health, and strongly supports an increase in its work, and in the involvement of new, young researchers in the field of biomedical research.

We commend you, Mr. Chairman, and the members of this committee for your staunch support of the NIH in this regard.

Even though we represent patients who suffer from Cooley's Anemia, nevertheless we have learned over the years that biomedical research, and specifically research in hematology and in Cooley's Anemia, promises us the best hope for the future. While progress has been moving forward at a rapid rate, there is little question in our minds that the excellence of the National Institutes of Health and of the various institutes within the NIH, has contributed considerably to the quality of life of our patients, and that of the families of the patients.

We would like now to turn to reports regarding two of the institutes at the NIH which support considerable hematology work in the area of Cooley's Anemia.

NATIONAL INSTITUTE OF ARTHRITIS, DIABETES AND DIGESTIVE AND KIDNEY DISEASES

The NIADDK, through its Hematology Program, continues to emphasize the support of research and training devoted to developing new and improved therapy for patients with Cooley's Anemia. In fiscal year 1984, the NIADDK awarded 42 grants and 3 contracts related to Cooley's Anemia, for a total of more than $6 million.

Advances in understanding the molecular biology of gene expression are being made rapidly, and information gained is being applied to the problem of Cooley's Anemia almost immediately. Numerous gene mutations are known, and the manner in which these alter gene expression to produce Cooley's Anemia has been identified. Regulatory DNA sequences and other modulating mechanisms have been described, and from these studies will come insights that may suggest new ways to manipulate gene expression in a therapeutically useful manner.

Several drugs, including 5-azacytidine and hydroxyurea, have been found to stimulate fetal hemoglobin synthesis in Cooley's Anemia patients, and this, in turn, has stimulated intensive investigation to determine the manner in which these drugs work, and to try to enhance the effect. These particular drugs probably will not find widespread utility in treatment of Cooley's Anemia patients, but they have raised the hope that it may be possible to increase fetal hemoglobin synthesis to the extent that patients will be symptom-free.

Bone marrow transplantation, while controversial as to which patients would benefit most and at what stage it should be applied, has proven successful in curing some Cooley's Anemia patients. Additional research will be required to solve problems of graft rejection and to improve transplantation techniques. When these problems are solved, it is likely that bone marrow transplantation will be useful more widely, although no one believes that it will be the final answer to Cooley's Anemia. Rather, genetic education and prenatal diagnosis will be necessary to decrease the incidence of the disease. However, the technique of bone marrow transplantation will be required for gene transfer therapy in the future.

The more traditional treatments of transfusion and chelation continue to be useful, and are being improved, particularly when they are administered in a combined fashion. Important issues remain unanswered, including the long term effects of transfusion therapy on red blood cell production. It is becoming increasingly apparent that subcutaneous Desferal^{R} therapy is capable of preventing the fatal consequences of hemochromatosis. No new chelators have been developed to the stage where they may be of clinical use, but a potentially useful one is undergoing animal toxicity studies, supported by the NIADDK.

Prenatal diagnosis for Cooley's Anemia has been refined to the point where it is rapid, safe, and suitable for use at a very early stage in pregnancy. Improvements in accuracy by better carrier screening in populations at risk soon may make possible an 80-90 percent reduction in world-wide incidence in the disease.

Gene therapy offers the potential for curing Cooley's Anemia. This procedure will require a delivery system to transport a normal gene into bone marrow cells, subsequent production of appropriate amounts of normal hemoglobin, and safety of all aspects of the procedure. Progress in such genetic engineering research is rapid, but diseases of hemoglobin abnormalities like Cooley's Anemia are going to be difficult to treat because of the complexity of this system. Clinical trials for some genetic diseases probably will begin in the next few years, but attempts to treat Cooley's Anemia by gene transfer are 5-10 years off at best.

Many of these advances were discussed at the fifth Cooley's Anemia Symposium, held in New York City in June, 1984, organized under the New York Academy of Sciences, and sponsored partially by the NIADDK. An associated session was organized by the NIADDK, in cooperation with the National Heart, Lung and Blood Institute, which brought together prominent investigators to discuss promising new directions, and to identify research needs and research directions. The NIADDK intends to pursue many of these directions suggested at the meeting.

NATIONAL HEART, LUNG AND BLOOD INSTITUTE

Several areas of research are currently undergoing work at the NHLBI. These include: Globin Gene Expression, Screening and Counseling, Turning-on the Genes for Fetal Hemoglobin (Hb F), Cardiac and Pulmonary Function in Thalassemia, Iron Chelation Therapy, SQUID-Noninvasive Measurement of Iron, Neocytes, 2,3-Diphosphoglycerate in Transfused Thalassemics, Alpha-Thalassemic Mice, Gene Therapy, and Bone Marrow Transplantation.

We would like to comment specifically on the SQUID-Noninvasive Measurement of Iron research. Considerable progress has been made on improving the SQUID technique for the noninvasive measurement of tissue iron deposits in chronically transfused patients. Major instrumental achievements have been (1) the calibration and full clinical operation of the new dual channel SQUID susceptometer, (2) redesign and construction of the hydraulic coupling device (water "bag" or "bellows") used in the differential measurement, (3) development and fabrication of improved system components (susceptometer support stand, motor-driven bed, computer upgrade), and (4) complete computerization of the measurement procedure, of data acquisition and analysis, and of the calculation of the hepatic iron concentration. Instrumental sensitivity, stability and noise rejection have all met or exceeded originally proposed levels. As a result, the sensitivity of magnetic measurements to changes in the hepatic iron concentration have been considerably enhanced.

This method, providing an automated magnetic "biopsy" of liver ferritin and hemosiderin iron, has been used in studies of about 80 patient and normal volunteers. Many of these studies would not have been possible with the prototype SQUID susceptometer because the single detector coil system was too large for use with children. Measurements with children as young as 6 years old have now been made with the smaller inner detector coil system of the new instrument. In vivo magnetic and in vitro chemical determinations in 7 patients have been closely correlated and do not differ. Magnetic measurements have been consistent with the histologic estimate of storage iron levels in an additional 6 patients whose tissue had not been analyzed chemically. The range of hepatic storage iron concentrations found in chronically transfused patients provide evidence for the effectiveness of chronic subcutaneous deferoxamine; magnetically determined hepatic iron concentrations are substantially lower in patients receiving long term chelation therapy than in their poorly compliant peers. In 11 patients with Cooley's Anemia, the magnetically determined hepatic iron concentration was closely correlated with the lifetime transfusional iron load and the lifetime deferoxamine dosage considered jointly.

These results provide a means for estimating, in an individual patient with a given total iron burden, a schedule of deferoxamine administration that could reduce the hepatic iron concentration to a normal level. Serial prospective magnetic determinations of hepatic iron are in progress in collaboration with two centers. Investigators at Children's Hospital of Philadelphia currently follow 29 patients with Cooley's Anemia who range in age from 4 to 30 years. Magnetic measurements have been used to document depletion of hepatic iron stores in 3 intensively chelated patients. Investigators at the National Heart, Lung and Blood Institute currently follow about 60 patients, 5 to 70 years old, who have transfusional iron overload. This group of patients includes about 35 individuals with Cooley's Anemia; the remainder have other forms of transfusion dependent refractory anemia (aplastic anemia, sideroblastic anemia, Blackfan-Diamond syndrome, pyruvate kinase deficiency, and other disorders). In conjunction with their yearly evaluation at NIH, these patients are now having hepatic magnetic iron measurements performed using the SQUID.

Considerable progress has also been made toward the goal of quantitative cardiac iron measurements. Studies in about 20 patients with transfusional iron overload have established that measurements of sufficient sensitivity to permit the detection of cardiac iron deposits may be made reproducibly. The procedure for cardiac measurements has been devised, tested using phantoms, and examined by mathematical modelling. Measurements in normal controls are now in progress and a clinical trial of the technique in iron loaded patients is about to begin.

Mr. Chairman, we deeply appreciate the opportunity to appear before you and I would be pleased to answer any questions you may have.

FACT SHEET

CONCERNING FY 1986 APPROPRIATIONS

The Cooley's Anemia Foundation has a number of recommendations to make to the committee this year.

1. We thank the committee for the bill report language that was inserted last year, primarily at the request of Senator Inouye of Hawaii. That language states:

   > "The Committee directs that an interagency task force be established, which, in conjunction with the Cooley's Anemia Foundation, would survey such needs of patients, and develop a comprehensive report, including an enumeration of those Federal, and federally-aided State programs, which could be used in creating a directory useful to patients, families, and medical and other institutions which serve them."

   We are very pleased to report that we have been in continuous communication with the Maternal and Child Health Program, and recently, on March 11, they pulled together a task force to accomplish just what was proposed, and it is out understanding that the final report is due sometime in May.

2. We recommend that the committee, in its bills report language, indicate that portions of the 15% set-aside shall be used to continue the program "of regional and national significance" for Cooley's Anemia in New York State and in New England.

3. We recommend that the National Heart, Lung and Blood Institute be funded at $894 million for fiscal year 1986.

4. We recommend that the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases be funded at the level of $637 million for fiscal year 1986.

5. We hope the bill report will stress that hematological research be carried on, as it is now, in a number of institutes.

6. We support the Ad Hoc Group for Medical Research Funding's request for overall NIH funding of $5.7 billion for FY 1986.

Ms. GIORDANO. This is Michael D. Filipo, the executive director of the Cooley's Anemia Foundation, and I am Vivian Giordano. I am a patient as well as a volunteer for Cooley's anemia.

The Cooley's Anemia Foundation has a number of recommendations to make to the committee this year. We thank the committee for the bill report language that was inserted last year, primarily at the request of Senator Inouye of Hawaii. That language states:

> The committee directs that an interagency task force be established which, in conjunction with the Cooley's Anemia Foundation, would survey such needs of patients, and develop a comprehensive report including an enumeration of those Federal, and federally aided State programs, which could be used in creating a directory useful to patients, families, and medical and other institutions which serve theme.

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We recommend that the committee, in its bills report language, indicate that portions of the 15 percent set-aside shall be used to continue the program of regional and national significance for Cooley's anemia in New York State and New England.

We recommend that the National Heart, Lung, and Blood Institute be funded at $894 million for fiscal year 1986.

We recommend that the National Institute on Arthritis, Diabetes, and Digestive and Kidney Diseases be funded at the level of $637 million for fiscal year 1986.

We hope the Hill report will stress that hematological research be carried on, as it is now, in a number of institutes.

We support the ad hoc group for medical research funding's request for overall NIH funding of $5.7 billion for fiscal year 1986.

Mr. Chairman, we deeply appreciate the opportunity to appear before, and I would be pleased to answer any questions you have.

Senator WEICKER. Thank you.

What do you estimate the number of persons suffering from Cooley's anemia to be?

Mr. FILIPO. From 5,000 to 8,000 according to the NIH.

Senator WEICKER. This afflicts all ages, or principally the young?

Mr. FILIPO. Principally the young, unfortunately, due to the fact that most of our children die before puberty. Before the drug Dispro came out 10 years ago, most of our children died before puberty. Therefore, we have a very small longevity.

Senator WEICKER. What is Cooley's anemia?

Mr. FILIPO. Cooley's anemia is a genetic blood disorder. According to the NIH, it is the single largest gene disorder in the world.

Senator WEICKER. Are we making any progress? You mentioned a drug.

Mr. FILIPO. It is a drug called Dispro which has extended the life of the children with Cooley's anemia. Now the children are living into their late twenties and early thirties. We are presently doing research to find an oral chelator which we think will help to extend their lives. Not only am I the national executive director, but I have a 15-year-old son with Cooley's.

Senator WEICKER. But no cure has been found at this time?

Mr. FILIPO. No; not at this particular time, Senator.

Senator WEICKER. Thank you very much for your testimony, we appreciate it.

Ms. GIORDANO. Thank you.

STATEMENT OF PAUL R. McCURDY, M.D., CHAIRMAN, PUBLIC EDUCATION COMMITTEE, AMERICAN SOCIETY OF HEMATOLOGY

Senator WEICKER. Next we have Dr. Paul McCurdy, chairman of the public education committee of the American Society of Hematology.

Dr. MCCURDY. Mr. Chairman, on behalf of the American Society of Hematology and its more than 3,000 members, I thank you for the opportunity to present testimony before this subcommittee again this year in connection with the legislation for the fiscal year 1986 appropriations for the National Institutes of Health.

I am Dr. Paul R. McCurdy, director of the Washington region of the American Red Cross Blood Services and professor of medicine at Georgetown University School of Medicine. I am here because I am chairman of the public education committee of the American Society of Hematology, the only national organization of hematologists. It is made up of physicians and biomedical scientists who are concerned with research, patient care, and teaching as they relate to the blood. Most do encology as well as hematology. So we have an interest in cancer.

At the start, I would like to express my deep gratitude to you, Senator Weicker, to your associates on this committee, and to the entire Congress for the very strong support last year on behalf of biomedical research and hematology.

We, further, are extremely grateful for your efforts to see that the research support intended by the Congress last year was actually provided. We hope that you are going to be successful as discussed earlier.

We greatly appreciate your longstanding commitment to the programs of the National Institutes of Health.

I would like to say also that our contacts with very able Senate staff have fostered mutual understanding of the best approach for the support of biomedical research. Finally, I would like to thank you for the Weicker-Inouye amendment which is adding funds to the NIH health budget line.

Recently, I had the opportunity to attend an international conference on acquired immunodeficiency syndrome, or AIDS. I was struck by the progress that has been made in understanding this devastating illness, much of it made possible by investigator initiated research in the past 10 to 20 years, as you so ably referred to earlier today.

Basic and quantitative research in hematology laboratories has played a disproportionately large role in supplying the ground work for our knowledge of AIDS at the cellular and molecular level. Understanding

AIDS at this level will undoubtedly speed the development of specific therapy, of course, this is now still several years away.

It is difficult to predict where the greatest opportunity for the future lie in biomedical research and hematology. It is my own view that further elucidation of molecular mechanisms of disease through investigator-initiated research will be most useful.

There are many divisions of hematology that will contribute to that.

Two points I made last year before this committee merit reiteration. First, much of biomedical research is interrelated among overlapping fields, with a great deal of cross-over of concepts and basic discoveries. Second, few advances can be made these days without investigators who are trained to take problems from the bedside to the laboratory, formulating testable hypotheses, and developing techniques and procedures to test these hypotheses. Research training merits continued support both through the mechanism of training grants and that of fellowship awards.

Our recommendations to the Appropriations Committee of the U.S. Senate are:

One, for the National Heart, Lung, and Blood Institute, a level of funding of at least $894 million for fiscal year 1986.

Two, for the National Institute of Arthritis, Diabetes, Digestive, and Kidney Diseases, a level of funding of at least $637 million.

Three, for the National Cancer Institute, a level of funding of at least $1.460 billion.

Four, for the National Institutes of Health, as a whole, a level of funding of at least $5.701 billion for fiscal year 1986.

Five, bill report language which stresses the fact that blood research is carried out in many NIH institutes, particularly NHLBI, NCI, and NIADDK, and that this wide-ranging research effort is recognized and should continue.

Six, bill report language which indicates that the 15 percent set-aside in the authorization legislation for blood research in NHLBI, a similar set-aside is provided for lung research in that institute, should be treated as a floor and not as a ceiling.

I would be pleased to answer any questions that you have. Thank you.

PREPARED STATEMENT

Senator WEICKER. I have no further questions, Dr. McCurdy. Thank you very much for your testimony which will be inserted in the record and your appearance here.

[The statement follows:]

STATEMENT OF DR. PAUL R. MCCURDY

On behalf of the American Society of Hematology and its more than 3,000 members, I thank you for the opportunity to present testimony before this Subcommittee again this year in connection with the legislation for the Fiscal 1986 appropriations for the National Institutes of Health.

I am Dr. Paul R. McCurdy, Director of the Washington Region of the American Red Cross Blood Services and Professor of Medicine at Georgetown University School of Medicine. I am here because I am Chairman of the Public Education Committee of the American Society of Hematology. This society is the only national organization of hematologists and is made up of physicians and biomedical scientists who are concerned with research, patient care and teaching as they relate to blood.

Before presenting our views about this legislation, I would like to express my deep gratitude to you, Mr. Weicker, to your associates on this Committee and to the entire Congress for their very strong support last year on behalf of biomedical research and hematology. We greatly appreciate your long-standing commitment to the programs of the National Institutes of Health. We further are extremely grateful for your efforts to see that the research support intended by the Congress last year was actually provided to the biomedical research community. One of the points I expressed to this Subcommittee last year was the importance of investigator-originated research. The message that 5,000 new and competing projects funded by NIH should be regarded as a floor rather than a ceiling was well received and acted upon. We also appreciate sincerely the assistance provided by very able Senate staff in fostering better mutual understanding of the best approach toward the support of biomedical research.

Recently, I had the opportunity to attend an International Conference on Acquired Immunodeficiency Syndrome (AIDS). I was struck by the progress that has been made in understanding this devastating illness, much of it made possible by fundamental investigator-initiated research in the past 10 to 20 years. Because blood is easy to sample and techniques have been developed to study rather common abnormal genes such as those for sickle cell and related abnormal hemoglobins, many of the techniques for molecular genetic analysis were developed and perfected in hematology research laboratories. Understanding AIDS at the molecular level will undoubtedly speed the development of specific therapy.

One of the troubling aspects of AIDS is its apparent transmission by blood and blood products. The HTLV-III antibody test currently being implemented to screen donated blood will significantly increase the safety of the transfusion of blood and blood componenets. Like all powerful and effective therapeutic tools, there have been and will always be unwanted side effects. Research and education on the best way to use the safest and most effective blood products will continue to be extremely important. Transfusion medicine is ripe for exploitation in both research and education, and we urge funding adequate to support Specialized Centers of Research in Transfusion Medicine, as has been planned by the NHLBI. Other SCOR programs, such as those in hemostasis and thrombosis, have been very productive and funding for them should continue.

It is difficult to predict where the greatest opportunities for the future lie in biomedical research and hematology. It is my own view that further elucidation of molecular mechanisms of disease through investigator-instigated research (so-called RO-l's and PO-1's) will be most useful. There are many divisions of hematology that will contribute. For example, the knowledge of red cell membranes is growing rapidly; much of this information will likely help the study of the membranes of many other cells. A molecular comprehension of the interactions between plasma clotting proteins, platelets and blood vessel walls will help us understand why some people bleed abnormally and others clot in the wrong places (e.g., brain -- stroke; heart -- heart attack; etc.). Further study of the synthesis of hemoglobin, and the cells where it is done in the bone marrow, will help understand protein synthesis in general, as well as the growth and maturation of cells.

Several points I made last year before this Subcommittee merit reiteration: 1) Much of biomedical research is interrelated among overlapping fields with a great deal of cross-over of concepts and basic discoveries. 2) Hematology has been and will continue to be a very productive field for research. Like the blood itself, it pervades all branches of biomedical science. Hematology research should continue to be supported by multiple Institutes of the National Institutes of Health. 3) Few advances, such as those mentioned above, could have been made without investigators who are trained to take problems from the bedside to the laboratory, formulating testable hypotheses, and developing techniques and procedures to test them. Research training merits continued support, both through the mechanism of training grants and that of fellowship awards.

Our recommendations to the Appropriations Committee of the United States Senate are:

1. For the National Heart, Lung and Blood Institute, a level of funding of at least $894 million for Fiscal Year 1986.

2. For the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases, a level of funding of at least $637 million.
3. For the National Cancer Institute, a level of funding of at least $1.460 billion.
4. For the National Institutes of Health, as a whole, a level of funding of at least $5.701 billion for Fiscal Year 1986.
5. "Bill report language" which stresses the fact that blood research is carried out in many NIH Institutes, particularly NHLBI, NCI, and NIADDK, and that this wide-ranging research effort is recognized and should continue.
6. "Bill report language" indicating that the 15% set-aside in the authorization legislation for blood research in NHLBI (a similar set-aside is provided for lung research in that institute) should be treated as a "floor" and not as a "ceiling."

THANK YOU.

STATEMENT OF THOMAS RYAN, M.D., PRESIDENT, AMERICAN HEART ASSOCIATION

Senator WEICKER. Next, Dr. Thomas Ryan, president of the American Heart Association.

Dr. RYAN. Good morning, Mr. Chairman.

I am Dr. Thomas Ryan, professor of medicine and chief of cardiology at Boston University's School of Medicine, and president of the American Heart Association. I am certainly pleased to appear before your subcommittee to provide the thoughts of our board and officers, plus our scientific community of 40,000 scientists, with funding recommendations for the National Heart, Lung, and Blood Institute.

I would like to begin by expressing our gratitude to this subcommittee for its strong support for biomedical research programs, and in particular for the generous funding increases provided to NIH in fiscal year 1985.

Although our statement this morning focuses on fiscal year 1986 appropriations for NIH and other HHS programs, we believe that the fiscal year 1985 funding issue must be resolved fully before consideration can be given to next year's funding.

The American Heart Association certainly believes that it was clearly the intent of Congress that NIH fund the 6,200 and 6,850 grants in fiscal year 1985, and that the funds should be spent in fiscal year 1985.

Mr. Chairman, I think I should express that the biomedical research community considers itself most fortunate that you are leading the negotiations with OMB to rectify the problems that exist with the 1985 funding. It is my personal view in that regard that even more important than the actual number of grants to be funded is the issue of the forward funding of 642 of those grants.

I, like many of my colleagues in the biomedical community, take some comfort in the wording of the Comptroller General, in response to your very important question, but I certainly think that the forward funding issue, to take a word from the Washington Post, is to be viewed as micromanagement in the extreme.

I would hope that you will make great progress in that specific area.

As far as the President's fiscal year 1986 budget, I think it includes an unprecedented 6-percent decrease below the fiscal year 1985 level for biomedical research programs at NIH, while a 12-percent increase is being recommended for Governmentwide research and development funding, a total amount that I believe exceeds $35 billion.

We are here to ask for $5.8 billion this year be awarded to NIH for fiscal year 1986. As you know, cardiovascular disease is this Nation's leading cause of death. In 1982, cardiovascular disease accounted for 50 percent of all deaths in the country. In 1985, the total economic costs associated with cardiovascular disease have been estimated to be over $72 billion in direct medical expenses and lost output due to disability.

The NHLBI's arsenal has been highly effective in the battle against cardiovascular diseases, and fiscal year 1986 funding for NHLBI must be sufficient to allow the NHLBI to adequately fund ongoing research, but it also has to be able to support emerging areas, targets of opportunity.

We are deeply distressed that the President's budget includes a 3.7-percent decrease in funding from fiscal year 1985 for 1986. The impact, in our view, of such a cut is going to be devastating.

We are especially concerned about the funding for the NHLBI centers program. We are concerned that the hypertension centers may be curtailed severely because they are the largest component of the NHLBI centers program, and research in the area of hypertension is critical.

The American Heart Association urges, Mr. Chairman, your subcommittee to approve an appropriation for the NHLBI for fiscal year 1986 of $910 million. This is an increase of 13 percent of the fiscal year 1985 level, and an increase which is consistent with the President's proposed 1986 increases for other Federal research programs.

In summary, the heart association would like to emphasize that what is needed more than anything else is stabilization of the funding and flexibility in program management of NHLBI. It certainly doesn't need more micromanagement from OMB.

I will be very happy to answer any questions.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony. Your submitted statement will be placed in the record at this point.

[The statement follows:]

STATEMENT OF DR. THOMAS RYAN

I am Dr. Thomas J. Ryan, Professor of Medicine at the Boston University School of Medicine, and President of the American Heart Association. AHA is one of the Nation's largest voluntary health organizations, comprised of 55 affiliate organizations, over 12,000 local components and over 2 million fundraising and program volunteers. We are the only voluntary agency in the United States devoting all of its human and financial resources to this one goal: the reduction of premature death and disability due to cardiovascular disease. I am pleased to appear before your Subcommittee today to provide you with our comments and funding recommendations for the National Heart, Lung and Blood Institute.

AHA has made biomedical research its number one priority by devoting over 30 percent of its annual budget to the funding of highly meritorious research into the causes, prevention and treatment of heart disease, stroke and related disorders. Since 1949, AHA has invested over $565 million in scientific research, hundreds of millions in updating medical skills that improve patient care, in public education, and in community service programs.

We would like to begin by expressing our gratitude to this Subcommittee for its strong support for biomedical research programs in the past, and in particular, for the generous funding increases provided to NIH in FY 1985. For the first time in recent years, NIH was able to expand its programs not only to keep pace with inflation, but to allow for some real growth in its various scientific endeavours. However, it still remains unclear whether or not the scientific community will be able to take advantage of this real-growth increase in funding. Although our statement and this hearing focus on FY 1986 appropriations for NIH and other HHS programs, we believe that FY 1985 funding issues must be resolved fully before consideration can be given to next year's funding.

Therefore, we would like to express our opposition to the Administration's order to limit the number of grants NIH can award in FY 1985 to 5,000 and to forward-fund 646 of those grants over the next three fiscal years before we comment on our FY 1986 funding recommendations. AHA believes that it was clearly the intent of Congress that NIH fund between 6,200 and 6,850 grants in FY 1985 and that the funds should be spent in FY 1985. Had it been the intent of Congress that these funds should be made available in subsequent years, it would have so indicated. AHA believes that there can be no compromise on this issue -- the 6,526 grant level for FY 1985 must be fully restored and the funds appropriated for these grants must be spent in FY 1985.

NIH-sponsored scientific and technologic breakthroughs have brought our Nation to a position of scientific leadership second to none in the world. In recent years we have witnessed unparalelled declines in morbidity and mortality rates due to not only cardiovascular disease and stroke, but cancer, diabetes and many chronic and disabling diseases. There are many reasons for these encouraging trends: a greater stress on preventive medicine; a higher level of awareness and concern on the part of the general public regarding healthy lifestyles; but most importantly, remarkable research breakthroughs in all fields of biomedical research and the translation of these important findings into clinical practice. These research advances not only save lives and improve patients' medical treatment, but result in a significant savings of tax dollars as well. It has been estimated that for each dollar spent in biomedical research, there is a return of $10 to $16 in reduced illness and medical costs due to increased life expectancy.

The President's FY 1986 budget includes an unprecedented 6 percent decrease below the FY 1985 level for NIH's biomedical research programs, while a 12 percent increase has been recommended for government-wide research and development funding. For example, for the Department of Defense R&D program, a 22 percent increase has been requested, for the National Science Foundation, a 6.5 percent increase was requested, and for the Department of Energy's R&D programs, an 8 percent increase was requested. Certainly the NIH deserves the same high funding priority as these other research and development components of the Federal government.

Funding of NIH programs at the levels requested in the President's budget for FY 1986 would severely restrict the NIH's ability to take advantage of current scientific and technological opportunities. It would allow funding of only 29 percent of the approved research grants; support very few of the pending clinical trials; preclude renovation of badly deteriorating physical plants and laboratories across the country; reduce greatly the number of Full Time Equivalents (FTEs) and support personnel responsible for overseeing NIH grants; reduce NIH's center grants which would lead to the disbanding of highly talented multidisciplinary research teams; and finally, maintain a static level of research trainees at a level below the 1984 level.

We urge the Subcommittee to recommend for FY 1986 an overall increase of 13 percent over the FY 1985 funding level for the biomedical research programs of the National Institutes of Health. This would (1) allow for slight growth as well as maintenance of initiatives undertaken in FY 1985; (2) provide funding for 6,500 new and competing research grants, the level of funding intended for FY 1985; (3) raise the number of research trainees near the level recommended by the National Academy of Sciences (approximately 10,500); (4) provide for the expansion of the communication and education programs of the National Library of Medicine; and finally, (5) allow for additional increases in research facility construction and renovation funding. Since 1948, the American Heart Association and the NHLBI have been active partners in the battle against cardiovascular disease. Throughout this 37-year partnership the research, training, and education and community programs of both the AHA and NHLBI have had a significant impact on the diseases of the heart and circulatory system.

Cardiovascular disease is this Nation's leading cause of death. In 1982 these diseases accounted for over 50 percent of all deaths. In 1985 the total economic costs associated with cardiovascular disease are estimated to be over $72 billion in direct medical expenses and lost output due to disability.

Despite these staggering statistics and costs, there is encouraging evidence that we are making progress against these diseases. Since 1968, the age-adjusted death rates for all cardiovascular disease declined by 26 percent. The decline in death rates for coronary heart disease is 25 percent; for stroke, 37 percent; and for hypertensive disease, 53 percent. And it is estimated that the decline in death rates due to coronary artery disease alone has resulted in the prevention of 114,000 deaths annually.

While we are encouraged by these trends, we must not become complacent because of past accomplishments. Currently, it is estimated that over 43.5 million Americans have one or more forms of cardiovascular disease -- high blood pressure afflicts an estimated 60 million individuals; 4.7 million have coronary artery disease; 2.4 million suffer from rheumatic heart disease; and over 1.9 million Americans have suffered a stroke.

The NHLBI's program arsenal has been highly effective in the battle against cardiovascular disease. The Institute's Advisory Council and the scientific community, over the years, have paid careful attention to the need for a balanced approach to the evolving program structure of the NHLBI. Although a high priority is given to the funding for research program grants, the NHLBI also stresses other program mechanisms such as clinical trials, population studies, specialized centers of research (SCORs), national research and demonstration centers, research career and training awards, and development contracts. This carefully balanced approach has contributed to the success of the Institute's programs, and enhanced its reputation as a world-wide leader in cardiovascular research.

Two examples of NHLBI's program effectiveness include the recent completion of the Coronary Artery Surgery Study (CASS) and the Coronary Primary Prevention Trial (CPPT). Both of these studies provided valuable knowledge that will aid in the more effective management and prevention of coronary heart disease. Furthermore, findings from these studies have provided significant opportunities for gaining new knowledge in the area of prevention and treatment of arteriosclerotic heart and vascular disease. FY 1986 funding for NHLBI must be sufficient to allow NHLBI to adequately fund on-going research, but also to expand into new and emerging areas of cardiovascular research. The following are examples of promising new initiatives that must not be deferred due to lack of funding:

- A Post-CPPT Survey of Public and Physician Attitutes and Practice Regarding Cholesterol
- Study of Cellular and Molecular Biology of the Atherosclerotic Lesion
- Research in Nutrition and Cardiovascular Disease
- Research Involving Molecular Genetics and Hypertension
- Protection of Immature Myocardium During and Following Cardiac Surgery

The above are but a few of the exciting areas of cardiovascular research that the NHLBI is planning to explore in the coming years. We urge Congress to give the highest priority to the funding of the NHLBI in order that the Institute may continue to address diseases that constitute our Nation's most serious health threat.

We are deeply distressed that the President's budget includes a 3.7 percent decrease in funding from the FY 1985 level for the NHLBI for FY 1986. The impact of such a cut will be devastating:

- Only 681 new and competing research grants will be funded. Compared with the 852 grants that were funded in FY 1984, this constitutes a discouraging 20 percent reduction in research grant support.
- Only grants with priority scores of 170 and lower are expected to be approved and the Institute's award rate is expected to be as low as 28 percent.
- Because of the institution in FY 1985 of forward funding certain research proposals, the FY 1986 noncompeting research grants level will drop below the FY 1984 and 1985 level.
- Originally scheduled expansion of the centers programs in FY 1986 will be put on hold. Additional discussion of the budget's impact on the NHLBI centers program is provided below.
- Other research, research training, research contracts and construction will be held at the FY 1985 level and no new clinical trials can be initiated.
- No increases are allowed for intramural research and research management and support functions of the Institute.

AHA especially is concerned about funding for the NHLBI centers program. In FY 1986 all the currently-supported hypertension research centers (5) will be up for renewal. Also NHLBI had planned to expand the hypertension research centers program in FY 1986 to a total of eight centers. The five renewal applications and three new center applications all have received excellent priority scores. Furthermore, there are six other NHLBI new or renewal centers (thrombosis -- 4; transfusion medicine -- 2) planned for FY 1986 as well.

The President's budget only allows funding for 55 centers in FY 1986, and 48 of these are continuation projects. Therefore, there are only seven center slots available for 14 potential center grant awards. We are concerned that the hypertension centers may be curtailed severely because they are the largest component of the NHLBI centers program. Research in this area is of critical importance because hypertension is one of the leading risk factors for all forms of heart disease and stroke and affects approximately 60 million Americans -- over 37 million have hypertension disease and 23 million are considered to be at risk because of elevated levels of blood pressure. In 90 percent of the high blood pressure cases, the cause is still unknown. Reduction in the number of centers awards also will divert a tremendous amount of time and talent from actual research to the time-consuming task of rewriting applications in order to achieve an even better priority score and to search for alternative sources of funding for on-going projects.

AHA urges the Subcommittee to provide sufficient funding for the NHLBI in FY 1986 so that a total of 69 center awards can be made. It is critical that a sufficient number of centers continue to be funded by NHLBI because of their unique ability to foster multi-disciplinary cooperation in the research on a particular problem and to seed new and promising research directions.

In summary, AHA urges the Subcommittee to approve an appropriation for the NHLBI for FY 1986 of $910 million. This is an increase of 13 percent of the FY 1985 level, and an increase which is consistent with the President's proposed FY 1986 increases for other Federal research programs. We believe that this level of funding would allow the NHLBI to continue current research momentum and to undertake several new initiatives with a high potential for success.

Senator WEICKER. I think what we have tried to do, at least in the past several years, is to give the stability that you talk about. I think that it is terribly important that everyone know where to go, and for your colleagues to enter the world of research.

As I stated earlier, I look forward to successful negotiations on these matters, which doesn't mean that I will get everything I want. The administration's position, and the problem that the administration is having, they say: "Yes, Senator Weicker, we agree with you on these 6,500 grants in the 1985 fiscal year." However, what we didn't realize, when we committed to that in the 1985 fiscal year budget, were the ramifications for 1986, 1987, et cetera. That is the difficulty they are having.

They are supposed to be precise in their knowledge of the budget. It seems to me a rather obvious fact that if we fund 6,500 in 1985, you are going to have them in 1986, et cetera. We are trying to work that out, and I am very hopeful that it will be worked out, maybe not at the 6,500 level, but certainly above the 5,500. I would guess that it will be around 6,000.

What worries me is, again as a percentage, we are not making any headway. We are not even staying even, really. I repeat, the product of those investments is something that the lack of will be felt in the outyears.

So this is where we are, and I greatly appreciate your support and the support of others like you in keeping people's feet to the fire on this issue. Let's see if we have something to be proud of by the time we are through with the budget process.

Dr. RYAN. We greatly appreciate and support your efforts, Senator, and we thank you.

Senator WEICKER. Thank you for taking the time to be here.

STATEMENT OF DR. ANTHONY DeMARIA, CHAIRMAN OF THE GOVERNMENT RELATIONS COMMITTEE, AMERICAN COLLEGE OF CARDIOLOGY

Senator WEICKER. Our next witness is Dr. Anthony DeMaria, chairman of the Government relations committee of the American College of Cardiology.

Dr. DEMARIA. Senator Weicker, I want to thank you for the opportunity to be here and address the committee. My name is Dr. Anthony DeMaria, and I am a member of the American College of Cardiology, which is a specialty society of 13,600 members. I am a member of the board of trustees, and also the chairman of the Government relations committee.

I would like to begin by thanking you initially for your support of biomedical research, particularly in regard to the NHLBI and heart research.

Just to begin with a statement of the magnitude of the problem. Heart disease is a major problem in our society. It accounts for nearly all of the deaths. Looked at it another way, almost as many people die of heart disease as of all other forms of disease combined.

In that regard, impressive gains have been made, as Dr. Ryan just stated to you, in the treatment of heart disease. Indeed, we have reduced the morbidity and mortality of coronary artery disease by approximately one-third since the mid-1960's.

The NHLBI has been critical in making many of these gains, and they have done it through four basic programs: Support of basic research; through support of clinical trials; through support of public education; and particularly in support of investigator training, or producing the investigators who will lead the fight against cardiovascular disease in the future.

As a bottom line, the American College of Cardiology would like to support and endorse an across-the-board 6-percent increase in the funding of NHLBI to continue these impressive gains in the fight against heart disease. We would like to support continued funding of investigator-initiated research grants which represent the best thinking and the best efforts of individual investigators.

We would, in addition, like to support clinical investigation which brings to the patients themselves impressive new types and forms of therapy such as coronary artery dilation, and new forms of therapy against hypertension.

Prevention is, of course, particularly important. We have seen impressive gains made in the treatment of heart disease, and they have been due to the efforts in the field of prevention, the field of diet and hypertension control in the NHLBI has been particularly effective in that regard. We would strongly endorse continued support in that effort.

An issue near and dear to my personal part is that of investigator training. As the new chairman of a cardiovascular division, and an individual who is responsible for bringing along new cardiovascular investigators, I can personally attest to the influence that Government support and NHLBI support has on stimulating new investigations and in attracting new individuals into the field of cardiovascular research.

Without such support and encouragement, those people are lost, their ideas, their talent, their efforts, and the future in particular will suffer.

Just to go over some specific numbers, we would recommend that the committee continue its support of funding of fiscal year 1985 NIH appropriations for a level of grants at 6,500 rather than 5,000. In the area of competing research grants, the NHLBI in fiscal year 1985 was able to fund only 40 percent of approved applications. Sixty percent of approved applications were not able to be funded. We feel that this is most regrettable.

Last, we would strongly endorse continued funding of the National Library of Medicine.

I would like to thank you, Senator Weicker, for the opportunity to address you, and for your support in the past. I would certainly be happy to respond to any questions.

PREPARED STATEMENT

Senator WEICKER. Thank you very much, Dr. DeMaria, for your testimony, I appreciate it. I have no questions. We will insert your submitted statement at this point in the record.

[The statement follows:]

STATEMENT OF DR. ANTHONY DEMARIA

Mr. Chairman, and members of the subcommittee, I am Dr. Anthony N. DeMaria, Professor of Medicine and Chief, Cardiovascular Division of the University of Kentucky College of Medicine. I participate in today's deliberations as representative of the American College of Cardiology, of which I am a member of the Board of Trustees and Chairman of the Government Relations Committee. The College is a 13,600 member medical specialty society dedicated to the prevention and treatment of cardiovascular disease. As such, the College is vitally interested in the research and training components of the National Heart, Lung, and Blood Institute and in the continued scientific progress of this vital Institute. We are similarly concerned with assuring adequate levels of support for the National Library of Medicine.

Regrettably, cardiovascular disease retains its distinction as the nation's number one killer, accounting for almost half of all deaths in recent years. Moreover, disorders of the heart and related arteries seriously impair an estimated 60 million persons in this country, about two-thirds of whom are under the age of 35. The cost of cardiovascular disease in terms of medical care and lost productivity has now surpassed the $90 billion mark.

These grim statistics, however, should not obscure the very real and impressive gains which have been made in the last two decades in the drive to reduce the incidence of heart disease in America. The death rate from stroke is now only half of what it was in the mid-60s. Coronary heart disease has been cut by one third in the same time period. Diseases related to hypertension have been reduced by 75%, as has the incidence of rheumatic heart disease. By way of comparison, the death rate for non-cardiovascular disease has declined in a similar period, by only about 12.5%.

The gains we have made in the fight against heart disease are largely attributable to the work of NHLBI in basic research, clinical trials, public education and investigator training. The importance of each phase of this effort must be acknowledged.

Research Grants

The investigator-initiated, basic research grant is the building block of our knowledge about prevention and treatment of heart disease. By means of the support offered through these grants, we continue to make breakthroughs in our understanding of atherosclerosis, which underlies coronary heart disease in most cases. We have also seen significant advancements in our knowledge of the cause and prevention of hypertension, which currently afflicts some 10-15% of the population. Hypertension creates a major risk of heart attack and stroke, and studies have shown that even mild hypertension is associated with shortened life span.

Clinical Research

The clinical application of basic research is the second step in NHLBI's mission. These programs have led to major breakthroughs in diagnosis and therapy for heart patients. Some specific examples of NHLBI supported clinical research which continues to impact positively on patient care are the following:

- Studies involving the refinement of therapeutic advances such as percutaneous transluminal coronary angioplasty, which involves the balloon dilation of the coronary arteries to reduce coronary obstructions. This technique has obviated the need for coronary artery bypass surgery in many patients.
- The Coronary Primary Prevention Trial (CPPT) which was the first study to establish a link between lowering blood cholesterol and a reduction in the incidence of heart attack.
- Studies in the use of laser technology in cardiovascular therapy.

Prevention

The NHLBI prevention efforts are the third column in the fight against heart disease. Through its public education initiative, NHLBI has disseminated to the public important research results concerning the prevention and treatment of heart disease. Recent initiatives have highlighted the risks of cholesterol and salt in the diet, strategies for cessation of cigarette smoking, and the importance of early detection and medical treatment of heart attacks.

Training

The education of the future researchers in cardiovascular disease is NHLBI's fourth major contribution to the health of the American people.

The future success of the NHLBI research effort, and indeed the success of our national effort to reduce the incidence of heart and vascular disease, depends upon the availability of well trained physician researchers. The supply of physician researchers in turn depends upon the existence of high-quality and financially stable training programs.

Notwithstanding our progress, we have barely scratched the surface in our effort to understand, for example, laser applications in cardiovascular research, risk reduction for heart attack, the genetic factor in hypertension, and the phenomenon of the "hot reactor," whose blood pressure is usually normal but who reacts with dangerous intensity to stressful situations. These are just a few of the many exciting new frontiers of cardiovascular research which require our ongoing commitment of funds and energy.

Administration's Request for NHLBI

The Administration's budget request for NHLBI for 1986 is, as you know, just over $775 million. This would represent a reduction of more than $28 million compared with FY 1985. In our view, this level of funding is quite inadequate to maintain an acceptable and appropriate level of research in the cardiovascular disease area. Moreover, we are dismayed by the recent order by the Office of Management and Budget to consolidate FY 1985 NIH appropriations to support only 5000 new research grants, as opposed to the congressionally sanctioned level of 6500. The level set in the last appropriations bill was reflective of the collective judgement of the Congress, in consultation with experts in the research community, and should not be changed by administrative fiat. We ask the committee to take whatever steps are feasible and appropriate to assure that the full 6500 research awards are made in FY 1985.

In the area of competing research grants, the NHLBI in FY 1985 was able to award funds to 40.2 percent of its approved applications. Put another way, almost sixty percent of the meritorious grant applications received had to be turned down. In terms of missed scientific opportunities and thwarted research careers, this is nothing short of a disaster for this country. We recommend that NHLBI be permitted to fund at least 50% of the approved grant applications, at an appropriation level of about $207 million for FY 1986.

Non-competing grants have faced across-the-board cuts in recent years, which is regrettable. We recommend that the Congress provide $332 million for non-competing grants in FY 1986. (FY 85 level: $324.6 million)

The important NHLBI work in clinical application of basic research must receive adequate funding in the fiscal year ahead. Critical ongoing efforts and promising new trials will suffer if adequate funds are not forthcoming.

One promising new area of research involves the almost infinite aspect of the scientific inquiry into the nature of blood pressure regulation. Recent studies have identified an atrial natriuretic factor (ANF), which involves a substance formed in the atria which decreases blood pressure. Many questions in this area remain unresolved and need further detailed study. We don't know, for example, what are the stimuli for the biosynthesis of ANF precursor materials. The answers to this and many other remaining questions about ANF will be enormously helpful in our ongoing medical effort to control high blood pressure.

Other promising new areas of research which will be thwarted or delayed by adoption of the Administration's budget include inquiries into the relationship between hypertension and the techniques of neurobiology, and the further refinement of non-invasive, (and therefore relatively inexpensive) diagnostic and therapeutic techniques including the aforementioned laser technology and also magnetic resonance imaging systems.

We recommend that the Congress provide an appropriation of $71 million for Clinical Research and Development Contracts. (FY 1985 level $61.7 million)

The Research Career Program offers assistance to promising young researchers, who are at the outset of their careers. Research training grants contribute substantively to this effort as well. The inadequate support for these programs represented by the Administration's Budget will shortchange the next generation of Americans in terms of research into the prevention and cure of cardiovascular disease. We recommend an appropriation of $25.4 million for the Research Career Program, and $45.3 million for research training. (FY 1985 Level-Research Career Program $19.6 million; Research Training $40.2 million)

The Specialized Centers of Research (SCOR) program is an effective means for concentrating resources, facilities and manpower on selected high priority research topics. We recommend that Congress allow $88.5 million for SCORs in FY 1986. (FY level: $83.5)

National Library of Medicine

The National Library of Medicine (NLM) is the world's largest research library in a single scientific and professional field. The Library is an invaluable resource to the medical community, collecting and cataloging an exhaustive list of medical journals, texts and periodicals. The Library's computer-based Medical Literature Analysis and Retrieval System (MEDLARS) is one of the excellent services provided by the NLM, permitting medical practitioners, students, scholars, and medical libraries across the nation ready access to the NLM computerized data bases.

It is impossible to place a dollar value on the public service performed by the National Library of Medicine. We recommend that $58.1 million be provided for the operation of the NLM in FY 1986. This would represent a 6% increase over the FY 1985 level of $54.8 million.

Mr. Chairman and members of the Committee, I am grateful for the opportunity to be with you today to discuss the important subject of funding for the National Heart, Lung, and Blood Institute and for the National Library of Medicine. The work being done by the NHLBI and the NLM is having an enormous effect on the health and well-being of the American people. I leave you with one last thought: The NHLBI and the other Institutes at NIH provide medical science its basic foundation. There is no such thing as a temporary disruption of that foundation. Short term budgetary savings will inevitably have long range consequences for the health and well-being of the American people. Thank you. Mr. Chairman, I will be happy, of course, to answer any questions you or the other members of the subcommittee may have.

STATEMENT OF WALTER HATCHER, PRESIDENT-ELECT, AMERICAN LUNG ASSOCIATION

ACCOMPANIED BY NORMAN EDELMAN, M.D., SCIENTIFIC AFFAIRS CONSULTANT

Senator WEICKER. Next we will hear from Walter Hatcher, the president-elect of the American Lung Association.

Mr. HATCHER. Thank you very much, Mr. Chairman.

The American Lung Association and the American Thoracic Society, ALA's medical section, thank you for this opportunity to comment on the biomedical research and health aspects of the fiscal year 1986 budget which are of particular concern to our lay volunteers, our scientists, and our health care professionals.

As you know, I am Walter Hatcher, president-elect of the American Lung Association, and I am accompanied by Dr. Norman Edelman, our scientific affairs consultant.

The Federal research program, particularly within the National Heart, Lung, and Blood Institute, has contributed significantly to the remarkable progress made in the past decade toward unmasking the basic physiological events underlying the development of lung diseases, and devising treatments and preventive strategies for these diseases. This progress translates into great savings in the cost of caring for patients disabled from lung diseases and in the cost of the loss of their productivity.

This progress must continue and indeed must be accelerated. The ALA and the ATS have reviewed the lung-related research, training and demonstration programs for the National Heart, Lung, and Blood Institute as well as for other institutes and agencies. Our recommendations are summarized in the text you have.

Because the NHLBI and its Division of Lung Diseases is the primary source of Federal funds for lung research, much of our written statement deals with this institute, its research programs for the prevention and control of lung disease, and the funding needs to conduct those programs.

Much has been accomplished in recent years, much remains to be done. Adequate resources should be provided for continuing these programs at a level of priority indicated by the magnitude of the lung disease problem in the United States. Yet, the President's budget proposal for fiscal year 1986 represents a decrease of 6 percent below the fiscal year 1985 appropriation level for the National Institutes of Health.

Further, this budget recommendation is based on the OMB proposal calling for a significant number of grants appropriated for in fiscal year 1985 to be forward funded in multiyear awards.

The ALA and the ATS have previously stated their strong opposition to this approach. Adoption of the President's recommended level of funding would allow only 29 percent of approved projects of the NIH to be funded, resulting in the rejection of many proposals rated at a high level of excellence.

Within the NHLBI, the President's proposal would result in 222 fewer new and competing research grants. The proposal would also have a serious negative impact on the research centers program supported by the NHLBI.

Within the lung program, for example, there are 21 research centers addressing a range of adult and pediatric lung diseases. The programs are scheduled for renewal in fiscal year 1987 and under the President's proposal would face significant reductions in scope and number.

The ALA/ATS funding recommendation of $965 million will allow for continued growth and evolution of the research, training, and development programs of the NHLBI, as well as the other research programs support by the Federal Government listed in our written summary.

For example, the NHLBI would be able to fund 1,205 new and competing grants, resulting in the funding of 50 percent of approved projects. In the area of research training, the NHLBI would be able to fund 1,700 trainee grants and 250 fellowships, an increase of 50 grants and 31 fellowships.

Proposals for reducing support of these programs will cost more in the long run than any anticipated short-term savings. The costs will be the missed research opportunities and dismantled programs, and in the resources necessary to diagnose and treat lung diseases.

The Biomedical Research Program of the Federal Government give strength and leadership to our entire health care system. In the absence of adequate Federal support, neither State nor local governments nor the private sector are financially capable of continuing these programs now supported by NIH.

We are now on the threshold of a host of remarkable breakthroughs and are already experiencing the first results of applying new biotechnologies and recent insights into cell biology. These new tools place us in a position to capitalize upon previous discoveries and provide the opportunity for extraordinary advances in the conquest of lung diseases by the end of the century. Thus, now more than ever, vigorous support and adequate resources for the Federal Biomedical Research Program makes sense, and is essential.

Thank you, Mr. Chairman. If there are any questions, we will be happy to answer them.

PREPARED STATEMENTS

Senator WEICKER. Thank you very much, Mr. Hatcher. I have no questions, and I appreciate both of you being here to give your testimony.

Mr. HATCHER. Thank you, Mr. Chairman.

Senator WEICKER. Your statement will be included in the record at this point along with other statements submitted for the record on appropriations for the National Heart, Lung, and Blood Institute.

[The statements follow:]

Statement of Walter Hatcher

The American Lung Association and the American Thoracic Society, ALA's medical section, thank you for this opportunity to comment on the biomedical research and health aspects of the fiscal 1986 budget which are of particular concern to our lay volunteers, our scientists, and our health care professionals. I am Walter J. Hatcher, President-Elect of the American Lung Association.

The concerns the ALA wants to focus on today are those relative to the prevention and control of lung disease. These diseases constitute a devastating and growing health problem in the United States (attachement 1). These diseases include lung cancer and emphysema and altogether rank third among the leading causes of death and sixth among the conditions responsible for premature retirement for disability. COPD--Chronic Obstructive Pulmonary Disease--is the most rapidly increasing of the 10 leading causes of death. The direct and indirect costs of lung diseases are a staggering $29 billion annually.

The federal research program--principally within the National Heart, Lung and Blood Institute--has contributed significantly to the remarkable progress made in the past decade towards unmasking the basic physiological events underlying the development of lung diseases, and devising treatments and preventive strategies for these diseases. This progress translates into great savings in the cost of caring for patients disabled from lung disease and in the cost of the loss of their productivity.

This progress must continue and indeed must be accelerated. The ALA and the ATS have reviewed the research lung-related research, training and demonstration programs for the National Heart, Lung and Blood Institute as well as for other Institutes and agencies. Our recommendations are summarized in the text you have. Because the NHLBI and its Division of Lung Diseases is the primary source of federal funds for lung research, the remainder of my comments will focus on this Institute--its research programs for the prevention and control of lung disease and the funding needs to conduct this program.

Summary: Health Appropriations Recommendations

National Heart, Lung and Blood Institute	$965 M
National Institute for Allergy and Infectious Diseases	$445 M
National Institute for Environmental Health Sciences	$234 M
National Institute for Occuapational Safety and Health	$ 90 M
Tuberculosis Project Grants	$ 9 M
Office of Smoking and Health	$ 4.5 M
Office of Health Promotion	$ 4.5 M

THE NHLBI LUNG PROGRAM

Major advances in both basic and applied knowledge of lung diseases have occurred since the reorganization of the NHLBI in 1969. As the Division of Lung Diseases became operational in the early 1970's, breakthroughs in pulmonary research began to occur. The research program is organized into component programs addrssing major areas of investigation:

- Structure and Function of the Lung: investigations provide the foundation for understanding the etiology, pathogenesis and clinical manifestations of respiratory diseases.

  Future investigations will continue to improve the understanding of structural and functional features of various lung cells, gas exchange and transport from the environment to the cell and the roles of chemical, mechanical, and neural factors in control of normal ventilation.

- Pediatric Pulmonary Diseases: investigations address disorders in infants and young children including neonatal respiratory distress syndrome, bronchopulmonary dysplasia, cystic fibrosis, and bronchiolitis. Future investigations will lead to improved detection, management, and prevention of neonatal disorders, identification of the basic defect in cystic fibrosis leading to pulmonary disease and improved management of cystic fibrosis through critical assessment of current modes of therapy and development of new regimens.

- Chronic Obstructive Pulmonary Disease: Chronic Bronchitis and Emphysema receive the major emphasis in this component. Because these diseases are irreversible once diagnosed, the research focus is on prevention through understanding risk factors and pathogenic mechanisms.

Future investigations will lead to the elucidation of basic mechanisms involved in structural and functional derangements associated with the progression of COPD, improved management of these diseases and prevention of COPD through understanding of individual risk factors and of their interactions and roles in the etiology and pathogenesis of these diseases.

- Occupational and Immunologic Lung Diseases: in most of thses diseases, the end stage change is pulmonary fibrosis. Understanding the involvement of immunologic responses in the etiology and pathogenesis of these diseases is an important objective of these investigations

  Future investigations will clarify the role of immunologic and other basic mechanisms in the onset of interstitial lung diseases and the progressive changes that lead to pulmonary fibrosis

- Pulmonary Vascular Diseases: research related to the pathogenesis of pulmonary edema, hypertension and thromboembolism is being carried out in this area of investigation.

  Future investigation will lead to the improved management of pulmonary vascular diseases through development of noninvasive diagnostic techniques and more effective therapeutic regimens.

- Respiratory Failure: the major research focus is on investigations to determine the causes of lung injury, identification of progressive changes that result in respiratory failure, and on ways to prevent or reverse progression.

  Future investigations will allow the clarification of intrinsic injury mechanisms which lead to respiratory failure and improved management of acute respiratory failure through development of measures to detect, arrest, or reverse degenerative changes following lung injury.

SUPPORT FOR BIOMEDICAL RESEARCH

As is clear from this brief summary of the lung research program within the NHLBI, much has been accomplished in recent years--but much more remains to be done. Adequate resources should be provided for continuing these programs at a level of priority indicated by the magnitude of the lung disease problem in the United States.

Yet, the President's budget proposal for FY 1986 represents a decrease of 6 percent below the FY 1985 appropriation level for the National Institutes of Health. Further, this budget recommendation is based on the OMB proposal calling for a significant number of grants appropriated for in FY 85 to be forward funded in multi-year awards. The ALA and ATS have previously stated their strong opposition to this approach. Adoption of the President's recommended level of funding would allow only 29 percent of approved projects of the NIH to be funded resulting in the rejection of many proposals rated a high level of excellence or priority. Within the NHLBI, the President's proposal would result in 222 fewer new and competing research grants. The proposal would also have a serious negative impact on the research centers program supported by the NHLBI. Within the Lung Program, for example, there are 21 research centers addressing a range of adult and pediatric lung diseases. The programs are scheduled for renewal in FY 1987 and under the President's proposal, would face significant reductions in scope and number.

The ALA/ATS funding recommendation of $965 million will allow for continued growth and evolution of the research, training and development programs of the NHLBI as well as the other research programs supported by the federal government listed in our summary. For example, the NHLBI would be able to fund 1,205 new and competing grants resulting in the funding of 50 percent of the approved projects. In the area of research training, the NHLBI would be able to fund 1700 trainee grants and 250 fellowships--an increase of 50 grants and 31 fellowships. Proposals for reducing support of these programs will cost more in the long run than any anticipated short term savings--the costs will be in missed research opportunities and dismantled programs, and in the resources necessary to diagnose and treat lung disease.

The biomedical resarch programs of the federal government give strength and leadership to our entire health care system. In the absence of adequate federal support, neither state nor local governments nor the private sector are financially capable of continuing these programs now supported by the NIH.

We are now on the threshold of a host of remarkable breakthroughs and are already experiencing the first results of applying new biotechnologies and recent insights into cell biology. These new tools place us in a position to capitalize upon previous discoveries and provide the opportunity for extraordinary advances in the conquest of lung diseases by the end of the century. Thus, now more than ever, vigorous support and adequate resources for the federal biomedical research program makes sense.

Thank you.

STATEMENT OF DR. HENRY HOOD, PRESIDENT, GEISINGER MEDICAL CENTER AND FOUNDATION

I am Dr. Henry Hood, President, Geisinger Medical Center and Foundation. As you may know, the Geisinger research effort is an integral part of a comprehensive, diversified multi-institutional system of health care that serves a region encompassing nearly 22,000 square miles. Each year, more than 36,000 people are admitted to Geisinger owned indoor managed hospitals and facilities. More than 500,000 people visited Geisinger physicians last year alone.

We at Geisinger believe that research is an essential component of medical advancement. In 1983 and 1984, Geisinger staff members took part in over 170 clinical and basic research programs investigating heart disease, cancer, and related areas. In the future, Geisinger will expand its research programs to contribute to the quality of its clinical and educational programs by searching for solutions to unsolved medical problems.

In the cardiovascular area, Geisinger's cardiology researchers are beginning pioneering studies involving Angiotensin II as it functions to "link up" with receptors on heart muscles to improve their function. It is known that Angiotensin II is one of those rare agents which can increase heartbeat. Our research will be the first to study and characterize the specific heart receptor involved and provide physiological evidence of its existence.

On behalf of my colleagues at Geisinger, I would like to emphasize how much we appreciate the opportunity to present our views on FY 86 appropriations for the National Heart Lung and Blood Institute (NHLBI), to this important Committee. I would like to preface this statement by emphasizing our support for NHLBI and its various programs pertaining to heart research. For several decades, NHLBI has consistently provided the leadership necessary to promote continued research in the area of cardiovascular diseases. Under the thoughtful guidance of Dr. Claude Lenfant, the Institute's cardiac research efforts have blossomed.

It is well known that cardiovascular disease is the leading cause of death in the United States today. Last year cardiovascular diseases accounted for twenty percent of all morbidity costs in the United States. Sixty million people suffer its effects. Given the recognized severity of this problem in terms of human suffering and economic consequences, it is imperative that NHLBI's resources be expanded so that a strong initiative in cardiovascular research can be maintained.

NHLBI's efforts center on hypertension, cerebral vascular diseases, coronary heart disease, peripheral vascular diseases, arrythmias, heart failure and shock, congenital and rheumatic heart diseases, and cardiomyopathies. In the past, NHLBI's leadership role has been evidenced by its support of a wide variety of important research efforts including: the study of alternative models of heart contraction, the use of perfluorochemicals in reducing tissue damage in victims of myocardial infaraction, and the relationship between coronary heart disease and behavior. Only recently, NHLBI's support of several critical research trials such as Hypertension Prevention Trials (HPT) and the Cardiac Arrythmia Pilot Study have added to its impressive list of credits.

Today, exciting new cardiovascular research opportunities loom on the horizon. NHLBI's support is crucial to the initiation of new research in the areas of:

- Molecular genetics
- Atrial Natiuretic factor studies
- Laser application in cardiovascular research

As is indicated by these new studies and others, the field of cardiovascular research is at a critical stage. In light of all the work that has been done and the great strides which continue to be made, appropriations for NHLBI must be increased in order to achieve the dual goals of expanding crucial research and promoting our nation's health. Given the critical stage of cardiovascular research efforts and the recognized severity of the diseases in which NHLBI's objectives lie, an appropriation level of $870 million is warranted for FY 1986. I believe that funding at this level will enable the Institute to fulfill its important mandate.

Overall, we recommend a FY 1986 appropriation of $5.7 billion for NHLBI's "parent" institution, the National Institutes of Health. This level of funding would provide sufficient resources for NIH to effectively carry-out its ever-important leadership role. For example, 6500 new and competing research grants should be funded just to keep the same level supported by the FY 85 appropriation. Even at this level, up to half of approved applications still will not be funded. Funding of research centers should also be increased beyond the 118 now provided for, for FY 86. Modest growth, especially in general clinical and biotechnologic research should be sought. Finally, appropriations sufficient to increase the number of research trainees should be a top priority.

Responsible appropriation levels must be granted in order for NIH, and specifically for NHLBI, to be ensured the capacity to carry out its overriding research commitment.

NHLBI's research is cost effective. In 1982 alone, $7.7 billion was saved due to a reduced death rate from coronary heart disease, nationwide. Money spent to combat cardiovascular disease is clearly money well-spent. Studies show that the rate of return on every $1 invested in medical research is $13. Most importantly, the cardiovascular research community has made enormous strides toward achievement of the most cost-effective goal of all -- prevention. For this reason alone, strong governmental support for NHLBI's programs must be considered a national priority.

On behalf of my colleagues at the Geisinger Foundation and cardiovascular physicians and researchers nationwide, I would like to convey our deepest appreciation for being afforded this opportunity to present our views today.

STATEMENT OF DR. DICK D. BRIGGS, JR., F.C.C.P., PRESIDENT, AMERICAN COLLEGE OF CHEST PHYSICIANS

I am Dr. Dick D. Briggs, Jr., President of the American College of Chest Physicians. I am also Professor of Medicine and Director, Division of Pulmonary and Critical Care, University of Alabama School of Medicine. I am submitting these views for inclusion in the formal hearing record on behalf of the American College of Chest Physicians, (ACCP). The ACCP is a professional medical specialty society of more than 11,000 physicians, scientists and educators who specialize in diseases of the heart, lungs and circulatory system. On behalf of the College let me emphasize how much we appreciate the opportunity to offer our views to this Committee on FY 1986 appropriations for the National Heart, Lung and Blood Institute (NHLBI), and the pulmonary activities of the National Institute of Allergy and Infections Diseases (NIAID).

I would like to preface this statement by emphasizing that ACCP enthusiastically supports the activities of the National Institutes of Health, particularly those of NHLBI and NIAID. Since its inception in 1948, NHLBI's role has expanded dramatically, today encompassing a sound national program in diseases of the heart, lungs, blood and blood vessels. Under the innovative leadership of Dr. Claude Lenfant, tremendous strides continue to be made in combatting cardiovascular and cardiopulmonary diseases. ACCP's recommendations are aimed at maintaining the momentum that has been achieved. One can hardly be unaware of the strains that have been placed on the federal budget in recent years. While we recognize the desirability of exercising fiscal austerity, we are ever-more compelled to emphasize the fact that diseases of the heart and lungs are the **most serious threat** to our nation's health.

Cardiovascular diseases afflict more than **60 million people** and represent the **leading cause of death in the United States today.** Although it is an inadequate guage of the untold costs in human suffering, cardiovascular diseases are responsible for a loss of about one hundred billion dollars each year in productivity, wages and costs of medical care. To give you an idea of the severity of the problem, the number of deaths from cardiovascular disease nearly equals deaths from all other causes combined.

It is therefore imperative that NHLBI be afforded sufficient resources to continue its efforts to combat the full panoply of cardiovascular diseases: hypertension, cereberal vascular disease, coronary heart disease, arrythmias, heart failure and shock, congenital and rheumatic heart diseases, cardiomyopathies and heart- and circulatory system-infection. These diseases afflict millions and millions of Americans.

NHLBI has always been in the forefront of the biomedical community in its efforts to expand existing knowledge about the structure and function of the heart and blood vessels. ACCP applauds NHLBI's support of basic research efforts involving such areas as: the relationship between behavior and coronary heart disease, the use of immunosuppressive therapy to faciliate heart-lung transplants, and the mechanism controlling macrophage-derived growth factor production in the pathenogenesis of atherosclerosis, to name just a few.

NHLBI's concerns are far broader than cardiovascular diseases. Although it was only a decade ago that the research mandate of the Institute was expanded to include the lung, NHLBI has today achieved a concerted strategy to meet the serious health problem posed by lung diseases.

Fifteen million Americans suffer from chronic lung diseases. It has been estimated that 46 million days lost from work, 40 million days of bed-restricted activity and twenty-five billion dollars in lost productivity, wages and medical care costs each year are attributable to pulmonary diseases. More than 100,000 deaths result each year from diseases of the lung, making it the sixth leading cause of death in the United States.

In the area of lung disease, the NHLBI focuses on six major areas: the structure and funciton of the lung; emphysema and chronic bronchitis; pediatric pulmonary diseases; fibrotic and immunological interstitial lung diseases, respiratory failure; pulmonary vascular diseases. NHLBI provides scientific leadership to the nation in these areas by directing efforts such as: the clinical impact of studies revealing extensive damage to lung macrophages due to a high concerntration of oxygen during therapeutic regimens; the role of chemotactic factors in chronic obstructive pulmonary disease; the nature of blood-borne, rather than inhaled, antigens entering pulmonary lymnphoid tissue; and the development of a risk index for chronic obstructive pulmonary disease.

NHLBI's committment to the study of diseases of the heart and lung is evidenced most clearly in its integrally-linked chain of research methodologies. Comprised of basic research, applied research, clinical investigation and demonstration/health care delivery programs, this system demonstrates the tangible advances which have been made available to the American public through the sponsorship of NHLBI.

Today, some exciting new areas of research await NHLBI's support. Among them,

- Molecular genetics of Heart, Lung and Blood diseases:

  Cardiopulmonary research is a fertile area for the application of the innovations which have been made possible by the new DNA technology, including:

  1) enhanced understanding of the molecular basis of disease processes, for example hereditary hemoglobin dieseases
  2) use of cloned genes to produce enzymes, proteins and peptides for research, and potentially for therapeutic use
  3) Use of gene therapy in clinical trials with potential application in the area of preventive medicine

- The effect of Atrial Natriuretic Factor (ANF) in blood pressure regulation:

  Blood pressue homeostasis is a complex phenomenon involving interactions among multiple control systems. The role of ANF in sodium balance, blood volume and blood pressure homeostasis, as well as its possible contribution to the patheno-genesis of a variety of cardiovascular diseases, including hypertension, should be examined.

- "Alpha 1-antitrypsin deficiency emphysema" -- replacement therapy:

  NHLBI studies have shown that this glycoprotein can be replaced in deficient individuals using recombinant-DNA methods.

- Cellular biology techniques and cell culture methods of research:

  The importance of endothelial cell-blood vessel wall interactions is not yet completely understood. Application in the areas of Atherosclerosis, (vascular smooth muscle cell and monocyte-macrophage studies), pulmonary disease

> and Coagulation Factor research appear to be the most promising avenues for the future.

NHLBI's research has consistently found application outside the heart, lung and blood fields. This is indicative that dollars spent for research are cost effective. For example, the Coronary Artery Surgery Study (CASS) scientifically demonstrated that coronary artery disease patients who are mildly symptomatic can safely defer bypass surgery. As a result, unwarranted hospitalizations and premature surgery is avoided, thus helping reduce the costs of health care for our nation. In fact, the rate of return on every dopllar invested in medical research is $13. Over the entire century through 1975, the gains achieved through expansion in medical research have always far exceeded the level of federal investment. Adjusted for inflation, the nation has reaped a seven-fold return!

Given the demonstrated economic soundness of biomedical research activities increased appropriation levels for NIH, and particularly NHLBI, should be a national priority. A modest increase, at a minimum sufficient to counteract the rate of inflation for biomedical research activities, should be sought. According to a recent Louis Harris Poll, an overwhelming majority of Americans believe that funding for basic research should be increased "by a sizeable amount" even in the face of the budget deficit.

In other words, while in this cost conscious time, it is tempting to try to simply "re-allocate the pieces of the biomedical research funding pie," the "pie" must instead be made larger. The ACCP believes that in order for NHLBI to be able to continue to fulfill its mandate and provide the leadership which is crucial to our national biomedical research effort, an appropriation of $855 million is necessary for FY 1986.

The National Institute of Allergy and Infectious Diseases, NIAID, sponsors important research projects which have broad implications in the respiratory field. Studies involving influenza viruses, and respiratory syncytial and parainfluenza viruses, provide important additions to our current level of knowledge of degenerative chronic diseases. For example, a research breakthrough in the area of asthma would assuage more than six million sufferers. Because of the importance of NIAID's research efforts related to viruses, and its study of such diseases as pneumonia and menigitis, ACCP strongly supports increased funding, to a level of $375 million, for NIAID.

In sum, the College now expresses its support of an appropriation level of $5.704 billion for FY 1986 for the National Institutes of Health (NIH). NIH funding at this level, which is $555 million above FY 1985, would provide the following:

- funds sufficient to award approximately 6,500 new and competing research grants, the same level supported by Congress in its FY'85 appropriation. Even this request will not fund approximately 2,400 high quality research grants (50 percent of approved applications) which represent important lost research opportunities.
- modest growth in research centers -- specialized/comprehensive, general clinical, and biotechnology research.
- opportunities to continue high priority major clinical trials, and to allow some growth in the research career programs, clinical education and other research related programs.

This recommended level of funding would therefore be consistent with our national committment to biomedical research and would translate into an appropriate, sound, and progressive level of NIH research activity which accurately reflects its vital mandate.

Reasonable increases in NIH appropriations must be granted if the pursuit of a full panoply of research opportunities is ever to be achieved. Among the opportunities now within our grasp in the area of cardiopulmonary research, are:

- Development of drugs that might interfere with the release of cholesterol into the blood stream, thus reducing coronary atherosclerosis and the risk of heart attacks.

- Understanding the role of allergic mechanisms in cardiac dysfunction, sudden death and myocardial infarction.
- Understanding how the clotting enzyme, thrombin, interacts with platelets, which would provide important information on how the early events in clotting take place. This work has important implications for heart attacks, stroke and other abnormal clotting situations.
- Heart, lung and vascular research in such areas as childhood asthma and occupational hazards, as well as programs to continue high blood pressure education and treatment.

Today, the ACCP continues to lend its support to those research efforts which are aimed at the ultimate cost-saving result -- prevention. NIH appropriation levels must be increased to insure that our progress toward that goal is not thwarted. The Federal Government must not turn its back on biomedical advances of the future which could yield billions of dollars in health care savings. Funding levels consistent with the important goals and essential mandate of NIH must be achieved. On behalf of ACCP's membership, I would like to thank you for affording us this opportunity to present our views.

NATIONAL INSTITUTE FOR DENTAL HEALTH

STATEMENT OF JAMES E. MULVIHILL, D.M.D., VICE PRESIDENT FOR HEALTH AFFAIRS, UNIVERSITY OF CONNECTICUT, AMERICAN ASSOCIATION FOR DENTAL HEALTH

Senator WEICKER. Next we will hear from Dr. James E. Mulvihill, vice president for health affairs, University of Connecticut, representing the American Association for Dental Research.

Good morning, Jim, how are you? We look forward to having your testimony. Why don't you go right ahead.

Dr. MULVIHILL. I am pleased to be here, Mr. Chairman.

I would like, as I begin, to identify myself today as representing the American Association for Dental Research, an organization of 4,000 scientists in hospitals, research institutes, universities, and industrial laboratories around the country concerned about dental research.

I would like also, if I may, in my role as vice president for health affairs at the University of Connecticut, to take a moment to thank you for your tireless efforts and express our gratitude for the efforts you have made in helping us establish the UAF Center for the Handicapped, the Health Center at Farmington, and Community Children's Hospital. We hope to do a lot of good things with this very precious entity for some very special people. We want to thank you for that.

Senator WEICKER. Thank you. I understand that congratulations are in order. You have been reappointed for 5 years as the vice president for health care at the University of Connecticut. Is that correct?

Dr. MULVIHILL. Yes; I have.

Senator WEICKER. That is good news.

Dr. MULVIHILL. I also want to reiterate Dr. Ryan's words to you on your outstanding leadership on this question of the research grants and all that. I do that on behalf of the dental research community and all education, as well as those of us running health centers throughout the United States.

Just to turn to the concerns of the American Association for Dental Research. As you know, Mr. Chairman, Americans continue to pay an exceedingly high dental bill each year, currently over $24 billion a year. To this figure must be added the cost of days lost from work and reduced productivity.

Additional evidence of the extent of dental diseases can be found in the surveys conducted by the National Center for Health Statistics and the World Health Organization. For example, we know that over 75 percent of adult Americans have gengivitis or perodontal disease, affecting not only the gum but the bones.

There are other areas requiring continued research and attention such as caries, facial deformities, the high incidence of oral sores caused by herpes simplex virus. It should be noted that dental scientists in collaboration with other scientific disciplines have developed now a vaccine against herpes simplex virus type I, which is effective in mice, and also produces substantial protection against herpes simplex type II. A good example of what you have said so often in the past, supporting our basic research efforts tends to apply to problems even beyond the discipline we are looking at. It is a very exciting development, one that has been made possible through the efforts of dental scientists working with others.

Dental diseases affect almost every man, woman, and child in our society. There is a strong need for continuation and support of that research.

In the area of periodontal disease, major pathogens and their roles in gum and bone destruction have been identified both in periodontal disease, in juvenile periodontitis, and chronic periodontitis in adults. Ongoing research in the area of periodontal disease is extremely important and complicated, and needs adequate support.

In the area of tooth decay, there has been a decline in the prevalence of dental caries and that continues. There probably isn't a reason why a lot of young people need to have one lesion, one carious lesion in their mouth by the time they reach age 18 largely because of the efforts of the dental research establishment at the universities and the NIDR.

This is resulting now in a savings minimally of $2 billion a year in dental bills compared to a decade ago for Americans.

Work is continuing, however, on further development of an anticaries vaccine and other methods to further reduce the incidence of dental decay in our society.

Work is also continuing on craniofacial malformations. These defects include cleft palate and cleft lip deformities, and other sorts of diseases of the face and the cranial structure.

Oral health care for persons with other types of handicaps is also being studied by dental scientists. Some of the specific areas being studied are methods for brushing teeth, use of antimicrobials for plaque control, and specialized treatment modalities required to meet specific oral problems resulting from the handicapping diseases.

Mr. Chairman, the investment made in the National Institute for Dental Research, which is the smallest as you know, is beginning really to pay off as evidenced by the substantial savings and some of the revolutions in our ability to treat and prevent dental disease.

We are asking for $113.5 million for NIDR this year, that is only one-twentieth of the annual savings just from tooth decay alone. We think that it is a very reasonable amount.

We thank you very much for your attention to our concerns.

PREPARED STATEMENT

Senator WEICKER. Thank you very much, Jim. I have no further questions. I am going to have to move along because I am running behind, but thank you so much for coming down today. I look forward to working with you in the years ahead. Your statement will be inserted in the record.

Dr. MULVIHILL. Thank you, Senator.

[The statement follows:]

STATEMENT OF DR. JAMES E. MULVIHILL

Mr. Chairman and members of the Committee, my name is Dr. James E. Mulvihill. I am the Vice President for Health Affairs at the University of Connecticut Health Center and Professor of Periodontics in the School of Dental Medicine. I am appearing today on behalf of the American Association for Dental Research (AADR), of which I am a member. I appreciate having this opportunity to present testimony regarding the fiscal 1986 budget for the National Institute of Dental Research and respectfully request that the full text of my testimony be included in the record.

The membership of the AADR consists of over 3,800 scientists, from a variety of basic science and clinical disciplines, located in universities, research institutes, hospitals, and industrial laboratories around the country. Our principal objective is to study the causes of the major diseases affecting the teeth and orofacial region, and to seek ways to control or prevent these diseases. We are pleased to make the resources of our organization, which is headquartered here in Washington, available to members of Congress and their staffs.

Statement of the Problem. Mr. Chairman, as you know, Americans continue to pay an exceedingly high dental bill -- currently over $24 billion per year. To this figure must be added the cost of days lost from work and reduced productivity.

Additional evidence of the extent of dental diseases can be found in the surveys conducted by the National Center for Health Statistics and the World Health Organization. These surveys found, for example, that in America, gingivitis and periodontitis are endemic, affecting 75 percent of adults, 68 percent of youths, and 30 percent of children. Typically, the younger age groups have a milder, reversible form of the disease -- that is, gingivitis affecting one or several teeth. The problems experienced by individuals afflicted with periodontal disease are inflammation, pain, bleeding, and, finally, loss of teeth and oral function.

There are other areas requiring continued research attention, such as caries, facial deformities, and the high incidence of oral sores caused by herpes simplex virus. It should be noted that dental scientists, in collaboration with researchers from other scientific disciplines, have developed a vaccine against herpes simplex virus type 1, which is effective in mice and also produces substantial protection against herpes type 2.

Dental diseases affect almost every man, woman, and child in our society. Thus, there is a strong need for research that will produce new knowledge about treating and preventing diseases of the mouth and face.

Research Achievements. Dental science has yielded numerous leads which promise that important new preventive measures for dental disease can be anticipated. For example:

- Periodontal disease. Major pathogens and their role in gum and bone destruction have been identified for the most common periodontal diseases, chronic periodontitis in adults, and for localized juvenile periodontitis. In addition, bacterial toxins, enzymes, and a variety of factors and other substances produced by infecting organisms, or by the immune system, have been described as contributing to periodontal tissue destruction.

Our researchers have found that the antibiotic tetracycline may be uniquely adapted to the treatment of some periodontal disease. Their work shows that it binds to the tooth structure, is released slowly in active form, and is able to inhibit bacterial growth and tissue breakdown. In addition, our scientists are conducting studies to understand why some patients with destructive periodontal disease respond well to therapy, while others do not.

The on-going research in the area of periodontal diseases demonstrates the complicated nature of these diseases and the need for deeper understanding to lead the way to effective means of prevention, as well as treatment.

* Tooth decay (dental caries). The decline in the prevalence of dental caries continues, thereby saving at least $2 billion a year in dentists' bills, compared to a decade ago. Work is continuing on the development of an anticaries vaccine and in developing new non-virulent strains of Streptococcus mutans, considered the major cause of coronal dental caries. Improved adhesive sealants are now available as caries-prevention measures for use on occlusal tooth surfaces to prevent pit and fissure caries.

As we look to the future, we expect that caries of tooth roots, while not a major problem at this time, will become increasingly important. People are living longer and are retaining more of their teeth. As the gingiva around the teeth recedes with age, the roots of teeth become exposed and may be vulnerable to caries attack, which can be difficult and costly to repair. As a first step in attacking the problem, dental scientists are seeking a thorough understanding of the etiology and histopathology of root surface caries. It should be noted that the NIDR has recently established three specialized centers for caries research to expedite progress in this area through coordinated, multi-disciplinary, basic and clinical research.

* Craniofacial malformation. These defects include cleft lip, cleft palate deformities of the jaw, incomplete ossification of facial or cranial bones, and facial asymmetries.

It has been assumed that genetic susceptibility to cleft palate formation is distributed in a continuous fashion and occurs only when environmental factors exceed a given threshold. It now appears that single genetic factors play a much larger role in the etiology of facial clefts than had been suspected. An on-going epidemiological study in Hawaii shows that the incidence of cleft lip and palate differs more than three-fold among the different racial groups living there. Further insights into the importance of genetic factors may be gained from a new study of cleft palate formation in a Hispanic population.

Currently, studies of potential or known agents which cause human birth defects, known as teratogens, are focusing on anesthetic gases and alcohol. An unusually high frequency of birth defects has been observed among offspring from operating room nurses, dentists, and dental assistants. Long-term exposure to gaseous anesthetics may be responsible. Alcohol is also considered to be a significant human teratogen. The fetal alcohol syndrome is characterized by, among other things, abnormal facial development.

Oral health care for persons with other types of handicaps is also being studied by dental scientists. Some of the specific areas being studied are methods for brushing teeth, use of antimicrobials for plaque control, and specialized treatment modalities required to meet specific oral problems resulting from the handicapping diseases.

- Pain research. Dentistry has long been concerned with the prevention and reduction of acute dental pain. A rapid, major expansion is now occurring in the understanding of the neurophysiological and neurochemical mechanisms involved in the transmission and modulation of pain wherever it occurs in the body. These rapid advances are establishing the foundation for improved diagnosis and treatment of pain problems affecting the teeth and the entire orofacial region.

Basic and clinical research investigations are now directing increased attention to chronic orofacial problems, which afflict millions of Americans. An estimated 20 to 25% of all chronic pain problems are localized in the head and orofacial region. These pain problems not only impair the quality of life, but also have a major economic impact. The costs associated with chronic pain total over $50 billion a year in the United States. At present, controversy surrounds both the diagnosis and treatment of such chronic orofacial pain problems as temporomandibular joint (TMJ) disorders and myofascial pain dysfunction (MPD) syndrome. There is thus an urgent demand to expand knowledge concerning chronic pain associated with orofacial joints and muscles, as well as to improve understanding of acute dental pain. The inauguration of one or more centers for the study of orofacial pain and related disorders in 1986, enlisting investigators from many disciplines in basic and clinical research on pain, should accelerate progress toward those ends.

Mr. Chairman, the investment made in the National Institute of Dental Research -- which is, as you know, the smallest NIH Institute -- is paying off, as is evidenced by the substantial reduction in the prevalence of dental caries and by the new knowledge about periodontal disease. We believe that the dental research community can and will continue, with the support of this Committee, to make progress toward solving the multitude of oral diseases confronting our society.

Mr. Chairman, we are fully aware of the difficult budgetary pressures facing this Congress, and it is with this in mind that we respectfully request the Committee to provide a funding level of $113,500,000 for fiscal year 1986. This level will allow on-going research to continue, and it will allow for a balanced investment in all of the elements of a successful dental research program -- namely, basic research, applied clinical research, training, and technology transfer. Unless all of these elements are funded in a balanced manner, we believe the taxpayer underwriting this enterprise will not reap the benefits of his investment.

I thank you for this opportunity to testify, and I will be happy to answer any questions.

AMERICAN ASSOCIATION FOR DENTAL RESEARCH

Proposed 1986 Budget for The National Institute of Dental Research

In order that the goals outlined for dental research can be accomplished, a 1986 budget for the National Institute of Dental Research is recommended as follows:

Program Items	Number	Amount (in thousands)
Research Grants		
Competing	150	$20,800
Non-Competing	253	31,200
Total	403	52,000
Research Centers		16,500
Other Research		6,500
Training		5,000
R&D Contracts		5,500
Intramural Research		21,000
Research Management & Support		7,000
TOTAL		$ 113,500

STATEMENT OF STANLEY HAZEN, DEAN, GEORGETOWN UNIVERSITY SCHOOL OF DENTISTRY, AMERICAN ASSOCIATION OF DENTAL SCHOOLS

Senator WEICKER. The next witness is Stanley Hazen, dean of Georgetown University School of Dentistry, American Association of Dental Schools.

Dr. HAZEN. Thank you, Mr. Chairman, for allowing me to be here this morning.

I am appearing today for the American Dental Association and the American Association of Dental Schools. Before I start on my written document, I would like to say that we do endorse the statements made by Dr. Mulvihill on behalf of the American Association for Dental Research.

I would like to highlight the major areas of concern of our association, and with the permission of the committee submit a more detailed statement for the record later.

As you know, Mr. Chairman, the administration's fiscal year 1986 budget proposed to terminate all remaining direct Federal support for health professions education. According to the administration, "continued Federal subsidy of health professions education programs is no longer required" because of the "steadily increasing supply of physicians and nurses, projected national surpluses in these fields by the end of this decade, improving geographic distribution of health professionals, and the need for budgetary constraints."

This analysis implies that our schools are mere factories, ignoring the substantial research and continuing education activities that are conducted. It overlooks the Federal role in assuring access to a health professions education to talented students from all economic backgrounds. It fails to acknowledge that these programs no longer encourage the training of increased numbers of health professionals.

Let me outline the reasons for recommending that student loan programs receive your continued support.

Health profession student loans are an essential source of moderate interest loan funds for dental and other health professional students. Recipients must have a demonstrated financial need with priority given to those with the most severe financial requirement.

Last year, these loans assisted approximately 5,200 dental students with an average annual award of $2,200. Continued Federal capital contributions are needed to establish adequate amounts for a workable revolving fund at each institution.

The health education assistance loan authority requires no Federal outlay for its continued existence. The cost of the HEAL Program is borne entirely by participating borrowers who pay an insurance assessment to offset defaults. No interest subsidy is provided.

Currently, students pay 12.75 interest on these loans. Last year, approximately 5,500 dental students borrowed almost $41 million through the HEAL Program to finance a portion of their dental education.

Although no direct appropriation is required for the HEAL loans, it is essential that an adequate credit ceiling exist to accommodate the expected need for student borrowing. We anticipate that a dramatic shortfall will occur between loan demand and credit ceiling for the 1985–86 academic year. As a consequence, student and institutional planning is approaching a near chaotic situation as schools seek to secure HEAL funding for their students.

We submit that such a crisis serves no purpose and can be avoided by assuring adequate credit borrowing. For fiscal year 1986, the credit ceiling must be revised upward to accommodate approximately $400 million in expected borrowing for all health professions students.

I would also like to comment on the recent, exaggerated reports of program misadministration and student default under the HEAL and HPSL Programs. The recently released inspector general's audit of the HEAL Program implies that school financial aid officers routinely approve loans to students for noneducational costs. This is not the case. Financial aid officers in dental schools are well-aware of the cost of HEAL and have focused on debt counseling and limited borrowing under all student loan programs, giving this special emphasis for the past 2 years.

Similarly, the reports of delinquency rates approaching 10 to 15 percent are not based in fact. The overall delinquency rate is now below 5 percent for dental schools participating in the HPSL Program and HEAL borrowers have a default rate of 5.3 percent. This compares with a delinquency rate of 5.8 percent recently reported for home mortgage payments.

Mr. Chairman, let me assure the subcommittee that we are committed to continuing our efforts in diligent administration and collection of student loans.

This ends my statement, and I will answer any questions that you might have. On a personal note, I would like to thank you for the support of our general practice residency program in dentistry, and your continued support, along with Senator Inouye, for funding of the Health Professions Program.

Senator WEICKER. Thank you very much, Dr. Hazen.

Again, at this time, nothing is certain until it is enacted into law, but it would appear that my agreement with the administration in the negotiations that started yesterday and are going on today takes the item that we discussed, the health professions training, which was zero funded, I believe, by the President, they have conceded to my point that that should be brought back to the present level.

Dr. HAZEN. We appreciate that.

Senator WEICKER. Let's hope that we can go ahead and keep it in place.

Dr. HAZEN. Thank you very much.

PREPARED STATEMENTS

Senator WEICKER. Your statement will be included at this point along with other sttements submitted for the record on appropriations for the National Institute for Dental Health.

[The statements follow:]

STATEMENT OF STANLEY HAZEN

My name is Stanley Hazen. I am Dean of the Georgetown University School of Dentistry and presently serve as a consultant to the Commission on Dental Accreditation of the American Dental Association. I am appearing today on behalf of the American Dental Association and the American Association of Dental Schools. This morning I would like to highlight the major areas of concern to our Associations and, with the permission of the Subcommittee, submit a more detailed statement for the record.

As you know, Mr. Chairman, the Administration's FY 1986 budget proposes to terminate all remaining direct federal support for health professions education. According to the Administration, "continued Federal subsidy of health professions education programs is no longer required" because of the "steadily increasing supply of physicians and nurses, projected National surpluses in these fields by the end of this decade, improving geographic distribution of health professionals, and the need for budgetary constraints." This analysis implies that our schools are mere factories, ignoring the substantial research and continuing education activities that are conducted. It overlooks the Federal role in assuring access to a health professions education to talented students from all economic backgrounds. And, finally, it fails to acknowledge that these programs no longer encourage the training of increased numbers of health professionals.

Let me briefly outline our reasons for recommending that student loan programs and primary care training receive your continued support.

Health Professions Student Loans (HPSL's) are an essential source of moderate interest loan funds for dental and other health professional students. Recipients must have a demonstrated financial need with priority given to those with the most severe financial requirements. Last year these loans assisted approximately 5,200 dental students with an average annual award of $2,200. Continued federal capital contributions are needed to establish adequate amounts for a workable revolving fund at each institution. This is particularly important for newer dental schools which require additional funds to develop a self-sufficient system.

The Health Education Assistance Loan (HEAL) authority requires no federal outlay for its continued existence. This program offers market rate loans to students who use them as loans of last resort. The cost of the HEAL program is borne entirely by participating borrowers who pay an insurance assessment to offset defaults. No interest subsidy is provided. Currently, students pay 12 3/4% interest on these loans. Last year approximately 5,500 dental students borrowed almost $41 million through the HEAL program to finance a portion of their dental education.

Although no direct appropriation is required for HEAL loans, it is essential that an adequate credit ceiling exist to accommodate the expected need for student borrowing. We anticipate that a dramatic shortfall will occur between loan demand and the credit ceiling for the 1985-86 academic year. As a consequence, student and institutional planning is approaching a near chaotic situation as schools seek to secure HEAL funding for their students. My own institution has been told that we can expect only 10% of the HEAL loans we need for the coming year. We submit that such a crisis serves no purpose and can be avoided by assuring adequate credit borrowing. For FY '86, the credit ceiling must be revised upward to accommodate approximately $400 million in expected borrowing for all health professions students.

I would also like to comment on the recent, exaggerated reports of program misadministration and student default under the HEAL and HPSL programs. The recently released Inspector General's audit of the HEAL program implies that school financial aid officers routinely approve loans to students for non-educational costs. This is not the case. Financial aid officers in dental schools are well aware of the cost of HEAL and have focused on debt counseling and limited borrowing under all student loan programs, giving this special emphasis for the past two years. Similarly, the reports of delinquency rates approaching 10 to 15 percent are not based in fact. The overall delinquency rate is now below 5 percent for dental schools participating in the HPSL program and HEAL borrowers have a default rate of 5.3 percent. This compares with a delinquency rate of 5.8 percent recently reported for home mortgage payments.

Mr. Chairman, let me assure the Subcommittee that we are committed to continuing our efforts in diligent administration and collection of student loans.

The one federally assisted health professions education program which exclusively affects dental students is advanced training in general dentistry. These primary care dental residencies provide the skills and clinical experience necessary for the treatment of handicapped and other patients requiring specialized or complex care. Demand for this training continues to be extremely high. Last year over 2,000 dentists applied for general dentistry training. However, only about one half that number could be accommodated. Past federal support has been vital to the establishment and initial maintenance of these residency positions. A modest investment will allow for the creation of new residency positions, which generally become self-supporting within three years. Accordingly, we recommend an appropriation of $2.7 million in FY 1986 for this important effort.

Mr. Chairman, this concludes our statement. I would be happy to attempt to respond to any questions which the Subcommittee may have.

STATEMENT OF GERTRUDE ENGEL, HEALTH ADVOCATE

Mr. Chairman and the illustrious members of the Appropriations Committee, I am Gertrude Engel.

I represent the American Health Education Foundation and our more than 600,000 readers. Also, Mr. Victor Earl Irons, our 90-year-old "Mr. America for Health" from Cottonwood, California. My previous commentaries were accepted and published (1980-1981-1982-1983-1984) volumes as part of my research dedicated to health practices.

We are pleased to note that the fluoride issue remains under a Health and Human Services status functioning under a block grant program, giving states and local communities freedom of expression to accept or reject fluoridation.

We present our additional research and ask, please, that these facts be included in the record.

We are concerned with the controversy caused by the American Academy of Pediatrics asking that formula fed infants be started on fluoride shortly after birth if they live in non-fluoridated areas. As for breast-fed infants the Academy advises that all should receive o.25 milligrams of supplemental fluoride daily regardless of the community's fluoride level.

However, they propose the prospect of fluoridated milk. The FDA believes it needs testing for safety before approval.

We believe this to be a mistake and propose an immediate withdrawal.

In a letter I received from the Citizens Action Program of Antigo, Wisconsin it stated the following:

"Antigo, Wisconsin, USA has been fluoridated 31 years to 1985. Public records show that since fluoridation, heart deaths increased from 86.4 per 100,000 BELOW the National average to 176.5 per 100,000 ABOVE the National average and continued to increase to 1979 when the last study was made. These records are public and can be checked by anyone.

"The contents of every water pipe from Antigo that was examined contained an excess of fluoride up to 3,100 parts per million."

The Honorable Judge Hamilton, U. S. Columbia District Court ruled for South Carolina that the Environmental Protection Agency render a fluoride policy statement. The EPA recommended a four parts per million (ppm) limit of fluoride for drinking water raising it from a primary standard of 2.4 recommended level, which varies in the different states. For instance Arizona which claims 1.4 parts per million (ppm).

A spokesman for the Centers for Disease Control maintains that the CDC will not become involved in the fluoride action - "it is up to Congress to make the decision, because of local and state dictates."

We, therefore, recommend that Congress keep this issue under a preventive HHS block grant program.

The office of management and budget (OMB) are now trying to work out their solution to the problem. They objected to EPA resolution. A 60 day comment period will soon be published.

Throughout the years with all of my research fluoridation was described as a menace.

Fluoridation is one of the biggest international scandals that has ever been promoted in the name of a health scheme. Not one single study has been published showing that fluoridation is safe.

NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND KIDNEY DISORDERS

STATEMENT OF ROBERTA DeVITO, PRESIDENT, AMERICAN BRITTLE BONE SOCIETY

ACCOMPANIED BY:
CONGIE DeVITO
ANNA MARIE DeVITO

Senator WEICKER. We now move on to witnesses who are here to appear on behalf of the National Institute of Arthritis, Diabetes, and Kidney Disorders.

Our first witness is Roberta DeVito, president of the American Brittle Bone Society, with her very able assistant.

Mrs. DEVITO. This is my son Congie who has osteogenesis imperfecta, and Congie is 9½ years old, or 9¾, and my daughter Anna Marie who is 10½ and does not have osteogenesis imperfecta, but is affected by the very fact that a family member has it.

I do want to take just a brief moment in my remarks because I would like to do something else, if you don't mind, but I would like to submit my report to be included in the record.

Senator WEICKER. Your statement will be included in the record in its entirety.

Mrs. DEVITO. I am so pleased to be here today. I should be more comfortable, this is my eighth year of testifying before the committee. I am so pleased and so happy this year that we can really be bumbling because, for the first time, we have had actual figures mentioned in relationship to osteogenesis imperfecta research. Coming from a mother, it is very touching. It is almost like being in love with an obstretrician of gynecology, every woman falls in love with that person. We are so much in love with you that you have really taken it to your heart to do something for us.

I laughingly told my son last year, "You have more pull on the Hill than I do." Senator Weicker really touched him, and by doing that you have helped the cause tremendously.

To get a little more specific about that. The research into osteogenesis imperfecta went up an additional $500,000 in the fiscal year 1985, which I don't have the revised figures on that yet, which won't be available until sometime later this year or early next. It has been continuing to go up, and for that I am so appreciative.

Of course, I am asking for additional consideration this year. Even in tough times, an additional amount of like or more isn't that much when it means so much to us and the researchers who are doing the studying of this disease.

I would also like to mention to you that you also have increased from the 1983 budget to the 1984 budget the osteoporosis research which our organization is interested in, and you have increased that along and along also.

The NIADDK budget for fiscal year 1984, the most current figures I have available, was $1,679,000, which I am sure you will agree, now that it is coming to light, more and more so, is not nearly enough for something that affects 15 to 20 million people. So we are asking to raise that substantially, the figures are in my report, so that more can be done on a disease that affects 1 in 4 women.

I would also like to say that some research money that went to Dr. Darwin Prockop at Rutgers Medical School to study osteogenesis imperfecta, which is a collagen disease, has led him to hypothesize and to believe that the major mutations that occur in osteogenesis imperfecta is the collagen gene. That same collagen gene, with minor imperfections, may be the cause of osteoporosis.

So it is kind of an interesting situation where the rarer disease may lead us to some answers in the much more common occurrence disease.

This is really all that I want to say except for the fact that I do support the NIADDK coalition's recommendation for a $5.7 billion overall NIH budget, and an overall NIADDK budget of $637 million.

I believe my son would like to say something to you, and perhaps walk around the table.

Senator WEICKER. How are you doing, Congie?

CONGIE DEVITO. Fine. How are you?

Senator WEICKER. Aren't you the fellow who wanted to run for the Senate?

CONGIE DEVITO. Yes.

Senator WEICKER. How is the race coming?

CONGIE DEVITO. Not bad. I got my business cards.

[General laughter.]

Senator WEICKER. That is very important. First things first, I know who you are.

CONGIE DEVITO. Senator Weicker, I am one of the national spokespersons for the American Brittle Bone Society. I would like to thank you and the committee for the extra research money you gave last year, and we would like the same to occur this year.

My mom and I, after the testimony last year, we really were pleased with the way you handled this. We would like to present you with a plaque in appreciation for the extra research money.

Mrs. DeVito. We would like to come around and do that, if you don't mind.

Senator Weicker. Why don't I come around there, it will make life a little easier.

Congie DeVito. In celebration of National Osteoporosis Awareness Week, May 1 through 7, 1985, the American Brittle Bone Society salutes with special honor and recognition Senator Lowell P. Weicker, Jr., for the application of the ideals of service to advance research of brittle bone disease.

Senator Weicker. Thank you very much. Not only is it a beautifully worded plaque, Congie, but it is a very heavy plaque. I can use it when I have my negotiations with the President.

[General laughter.]

Mrs. DeVito. Thank you very much. I hope you don't mind the informal note, but it meant so much to us.

PREPARED STATEMENT

Senator Weicker. We will look forward to what happens, but I think that it will be good news when it happens.

Mrs. DeVito. Thank you very much.

[The statement follows:]

STATEMENT OF ROBERTA DEVITO

SUMMARY OF RECOMMENDATIONS

Osteoporosis
Osteogenesis Imperfecta

1) Provide impetus for emphasis on connective tissue diseases, primarily collagen-related, particularly osteogenesis imperfecta and osteoporosis.

2) Strive, at the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK), for more equitable funding of the Division of Arthritis, Musculoskeletal, and Skin Diseases as it compares to the Division of Diabetes, Endocrinology and Metabolic Diseases in order to stress the importance of research of the musculoskeletal system, in particular, osteogenesis imperfecta and osteoporosis.

3) Increase FY '86 funding of osteoporosis at the NIADDK from the FY '84 level (most current figures available) of $1,679,000. Recommendation is for an increase commensurate with the size and severity of the problem. With nearly twice as many victims as diabetes, the recommendation is for comparable funding of research and treatment centers, with a significant injection of funds to the scientific industry now burgeoning with creative interests in the the field of bone metabolism, specifically that of osteoporosis. Until such time that studies indicate the significant lack of funding for osteoporosis, the recommendation is that NIADDK be given the wherewithall to allow for awards in the vicinity of $5,070,000 for FY '86, and that total NIH appropriations for FY '86 approach the $20,000,000 mark for osteoporosis research.

4) Increase FY '86 funding of osteogenesis imperfecta at the NIADDK by at least another $500,000. FY '84 awards at the NIADDK were $1,091,000 and another $5,000 was spent by the

Division of Research Resources, not to mention intramural expenditures at the Clinical Center (figures unavailable) for two projects.

5) Maintain the tradition of strong support for continued growth and opportunity at the NIH by supporting an overall NIH budget for FY '86 of $5.7 billion and an overall NIADDK budget of $637,997,000.

You have shown a heartwarming interest in brittle bone diseases, particularly osteogenesis imperfecta, and, as you are aware, this pleases me personally because my 9½ year old son Congie, here with me today, has this condition. His 10½ year old sister Anna Marie, also here today, does not appear to have OI, but she, as are all family members in all families with a member with OI, is affected. In ways that are not immediately obvious and in ways that are not without their positive side. But OI does affect more than the family member; hence, though it is, fortunately, a rather uncommon occurrence (20 to 30 thousand Americans at this time), it is a disease with far-reaching effects, some more tragic than others as the disease has a great range of variability and as those affected have individualized capacities for dealing with pain.

Nothing pleases anyone in this situation more than knowing that people of power and with the means to help are using their position to gain strides in knowledge about OI. The only thing that approaches the joy in knowing that you are working to achieve some answers to this problem is knowing that there are many inquisitive researchers intrigued with the many questions OI affords them. There are a lot of unanswered questions. And, you on this Committee have been lining up the means for helping to find some of these answers. Thank you!

Just this past fiscal year, you initiated the language that achieved an additional $500,000 in the NIADDK budget for OI. You will be interested in learning that this money has gone to support a five-year, $2.5 million grant from the NIH to Dr. Darwin J. Prockop, MD, PhD, professor and chairman of the department of biochemistry at the Piscataway, NJ - based UMDNJ-Rutgers Medical School. The award will advance research into collagen, the body's most abundant protein and one that supplies the major strength to bones, skin, and blood vessels. These studies could bring more effective treatment of osteoporosis and other bone diseases.

Over the past several years, the Prockop group has focused its attention on osteogenesis imperfecta. Dr. Prockop has proposed that the collagen genes (which in OI there are major defects) may in apparently healthy individuals have minor mutations which predispose them to diseases such as osteoporosis.

If the individuals who have a genetic predisposition to the diseases of mid-life (i.e. osteoporosis) can be identified, preventive measures become possible if the treatments are started before the changes produced by osteoporosis become irreversible.

What you've just read is subtly startling news -- that the collagen gene with major defects may be responsible for some types of OI and with minor defects may be responsible for the brittle bones of mid-life and beyond, osteoporosis.

In one family that Dr. Prockop's team is working with, both parents, who are in their 30's, carry what appears to be a gene for OI and their child has OI. X-rays of the parents show evidence of osteoporosis.

His team plans to determine whether parents of other children with OI show early signs of osteoporosis.

This typifies how research into one brittle bone disease may turn out to be beneficial to another, perhaps the rarer disease teaching us about the more common one.

All research has the potential to be beneficial. One can never know from which corner the knowledge will come. But, it will come IF the Congress continues its traditional strong support of basic biomedical research and training programs for bringing new researchers, new ideas into the field.

For this reason, it is urged that the Congress support an overall NIH budget for FY '86 of $5.7 billion and an overall NIADDK budget of $637,997,000. It is my opinion that this is necessary to truly maintain past growth with modest enhancement over the FY '85 budget.

Thank you.

The following is a summary of the attached listings. Please note that the Clinical Center has not assigned costs to their two projects. The Division of Research Resources supplied their information in a slightly different manner.

Osteoporosis

BID	FY '84 No. of Projects	FY '84 Awarded Amount (in thousands)	Awards FY '86 Recommendation (in thousands)
NIA	15	$2,961	$ 7,883
NIADDK	13	1,679	5,070
NCI	1	81	?
NIDR	8	1,622	4,866
DRR	27	694	2,082
NIH TOTAL	64	$7,037	$19,901 +

Osteogenesis Imperfecta

BID	FY '84 No. of Projects	FY '84 Awarded Amount (in thousands)	Awards FY '86 Recommendation (in thousands)
NIADDK	6	$1,091	$1,591
RR	2	5	10
CC	2	N.A.	?
NIH Total	10	$1,096	$1,601 +

FY 1984 TRANS NIH OSTEOPOROSIS REPORT

PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD
5R01AG02483-05		WASNICH, RICHARD D	KUAKINI MEDICAL CENTER	$294,657
Epidemiology of osteoporosis in an aging Japanese population				
2R01AG02577-03		NIMNI, MARCEL E	UNIVERSITY OF SOUTHERN CALIFORNIA	$90,320
Osteogenesis--development, modulation, and aging (rats)				
5R01AG03865-03		BURNELL, JAMES M	UNIVERSITY OF WASHINGTON	$122,926
Osteoporosis--Subtypes and treatment response (human)				
5R01AG04518-01		HUI, SIU LUI	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	$79,112
Longitudinal studies of bone loss in aging				
1R03AG04671-01		EVERETT, GEORGE D	UNIVERSITY OF IOWA	$20,574
Relationship of hip fractures to fluoride in water				
5P01AG04727-03	0003	CARPENTER, CAREN M	CHILDREN'S HOSPITAL (BOSTON)	$45,713
Aging cells and tissues-Osteocalcin and vitamin K metabolism in osteoporosis				
1R03AG04832-01		TESAR, ROGENE	UNIVERSITY OF FLORIDA	$13,892
Total bone mineral in vegetarian and omnivorous women				
1P01AG04875-01		RIGGS, BYRON L	MAYO FOUNDATION	$616,877
Physiology of bone metabolism in an aging population				
	0001	RIGGS, BRYON L	MAYO FOUNDATION	
		Pathophysiology of types of age-related bone loss (human)		
	0002	MELTON, LEE J	MAYO FOUNDATION	
		Risk factors for hip fractures among the elderly (human)		
	0003	MANN, KENNETH	MAYO FOUNDATION	
		Noncollagenous bone matrix proteins (rabbits, mice, cattle, human)		

PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD
1P01AG04875-01	0004	MANN, KENNETH	MAYO FOUNDATION	
		Biochemical quantitation of bone-specific proteins (human, cattle, rabbits, mice)		
	9001	O'FALLON, WILLIAM M	MAYO FOUNDATION	
		Biostatistics core		
5R01AG03023-01		MARTIN, R BRUCE	UNIVERSITY OF CALIFORNIA DAVIS	$ 31,430
Mechanical stimuli and estrogen in bone remodelling (dogs)				
5R01AG00258-16		KLEIN, LEROY	CASE WESTERN RESERVE UNIVERSITY	$236,144
Quantitative dynamics of bone remodeling with age (dog, rat, chicken)				
5R01AG02899-03		GOLDHABER, PAUL	HARVARD UNIVERSITY	$175,849
Effect of age on bone remodeling in vitro and "in vivo" (mice)				
5R01AG02927-04		LONGCOPE, CHRISTOPHER L	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	$212,966
Steroid dynamics in age-related bone loss (mice)				
5R01AG03418-03		NEER, ROBERT M	MASSACHUSETTS GENERAL HOSPITAL	$ 60,214
Pathophysiology of age-related bone loss (human)				
5R01AG04224-02		GRYNPAS, MARC D	MOUNT SINAI HOSPITAL (TORONTO)	$ 33,785
Structural changes with age and disease in bone mineral (chickens, mammals)				
1Z01AG00051-04		SACKTOR, B		$926,898
Phosphate and calcium homeostasis--Pathophysiology of osteopenia in aging				
			TOTAL NIA	$2,961,357

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                                        DIVISION OF RESEARCH RESOURCES
                                           OSTEOPOROSIS RESEARCH
                                      1984 SUBPROJECT SUPPORT BY PROGRAM

RANT NUMBER  PROGRAM DIRECTOR  SUBPROJECT FUNDS         INSTITUTION              CITY              STATE                 TOTAL
BPROJ    INVESTIGATOR          BID        DRR              TITLE                                                      DRR AWARD

7RR05304-23                      04/84-03/85 UNIVERSITY OF CALIFORNIA LOS ANGELES
819 KRATOCHVIL, FRANK                  2,024    OSTEOPOROSIS AND ALVEOLAR BONE RESORPTION                                87,735

7RR05390-23                      04/84-03/85 CREIGHTON UNIVERSITY
345 GALLAGHER, JOHN C                    668    CALCITONIN IN POSTMENOPAUSAL OSTEOPOROSIS                                32,357

7RR05412-23                      04/84-03/85 OREGON HEALTH SCIENCES UNIVERSITY
611 MCCLUNG, MICHAEL R                 4,450    HISTOLOGIC CORRELATES OF THERAPEUTIC RESPONSE IN POSTMENOPAUSAL OSTEOPOROSIS 178,711

7RR05441-23                      04/84-03/85 UNIVERSITY OF CALIFORNIA BERKELEY
580 HALDEN, OLIVIA                       342    RELATION OF BONE DENSITY TO RISK OF OSTEOPOROSIS: RACE, AGE, SEX, CALCIUM INTAKE 52,144

7RR05458-22                      04/84-03/85 COLORADO STATE UNIVERSITY
093 WRIGLEY, ROBERT H                  4,008    RADIOGRAPHIC, GRAVIMETRIC, HISTOLOGIC & HISTOMETRIC EVAL OF DIFFUSE OSTEOPOROSIS 78,584

7RR05728-13                      04/84-03/85 UNIVERSITY OF FLORIDA
480 LOW, SAMUEL B                         49    FEMALE SEX HORMONES W/ PRESENCE OF OSTEOPENIA OSTEOPOROSIS & PERIODONTAL DISEASE 27,369

7RR05778-09                      04/84-03/85 STATE UNIVERSITY NEW YORK STONY BROOK
668 RENNER, ROBERT P                     490    RADIOGRAPHY OF OSTEOPOROTIC MANDIBULAR BONE MASS IN POST-MENOPAUSAL WOMEN   32,894
672 RENNER, ROBERT P                     340    FACTORS RELATED TO THE DIAGNOSIS OF OSTEOPOROSIS IN DENTAL PATIENTS

7RR07048-19                      04/84-03/85 UNIVERSITY OF MASSACHUSETTS AMHERST
453 ARMELAGOS, GEORGE T                  113    NUTRITION ON PREMATURE OSTEOPOROSIS IN PREHISTORIC POP FROM SUDANESE NUBIA  93,267

7RR07096-19                      04/84-03/85 UNIVERSITY OF WASHINGTON
779 DRINKWATER, BARBARA                6,187    ATHLETIC AMENORRHEA AND RISK FOR PREMATURE OSTEOPOROSIS                 174,156
OMEDICAL RESEARCH SUPPORT             18,671       10  DRR SUBPROJ                        9   DRR GRANTS
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                                                       BID SUBPROJ                            DRR GRANTS W/BID FUNDS

S10RR01948-01                    01/84-12/84 LOUISIANA STATE UNIV MED CTR NEW ORLE
10900 WINK, CAROLE S                   7,920    EX SEM: HORMONES & OSTEOPOROSIS                                          88,000
BRSG SHARED INSTRUMENTATION            7,920        1  DRR SUBPROJ                        1   DRR GRANTS
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                                                       BID SUBPROJ                            DRR GRANTS W/BID FUNDS
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                                          DIVISION OF RESEARCH RESOURCES
                                             OSTEOPOROSIS RESEARCH
                                        1984 SUBPROJECT SUPPORT BY PROGRAM

GRANT NUMBER  PROGRAM DIRECTOR  SUBPROJECT FUNDS            INSTITUTION              CITY             STATE                 TOTAL
SUBPROJ    INVESTIGATOR         BID          DRR               TITLE                                                      DRR AWAR

M01RR00030-23                         12/83-11/84 DUKE UNIVERSITY                                                          1,372,27
20012 DREZNER, MARC K                      30,714    EFFICACY & SAFETY EVALUATION OF ROCALTROL IN OSTEOPOROSIS

M01RR00036-24                         04/84-11/84 WASHINGTON UNIVERSITY                                                    2,191,26
20204 AVIOLI, LOUIS V                     134,100    STUDIES OF METABOLIC BONE DISEASE
20245 AVIOLI, LOUIS V                      25,352    STUDIES IN METABOLIC BONE DISEASE

M01RR00037-24                         07/84-11/84 UNIVERSITY OF WASHINGTON                                                 1,330,16
20297 CHESNUT, CHARLES H,                   2,653    RESPONSE OF CALCITONIN TO ESTROGEN THERAPY IN POSTMENOPAUSAL OSTEOPOROSIS
20298 CHESNUT, CHARLES H,                  18,407    1,25 (OH)2D AS THERAPY FOR PATIENTS WITH POSTMENOPAUSAL OSTEOPOROSIS

M01RR00082-22                         12/83-11/84 UNIVERSITY OF FLORIDA                                                      659,71
21766 THOMAS, WILLIAM C                       940    METABOLIC BONE DISEASE

M01RR00123-21                         12/83-11/84 CHILDREN'S HOSPITAL MED CTR (CINCINNA                                      629,50
22196 MARDER, HAROLD K                        155    CALCIUM REGULATION IN IDIOPATHIC JUVENILE OSTEOPOROSIS

M01RR00125-21                         12/83-11/84 YALE UNIVERSITY                                                          2,587,08
22277 RASMUSSEN, HOWARD                     7,469    POSTMENOPAUSAL OSTEOPOROSIS TREATMENT WITH CALCITONIN & PHOSPHATE

M01RR00188-20                         12/83-11/84 BAYLOR COLLEGE OF MEDICINE                                                 755,15
22374 KIRKLAND, REBECCA T                   3,001    ESTROGEN & ANABOLIC AGENT ADMINISTRATION IN BONE DENSITY & CLINICAL

M01RR00211-20                         12/83-11/84 UNIVERSITY OF TENN CENTER HEALTH SCIE                                    1,186,17
22520 PALMIERI, GENARO M                    3,456    EFFECT OF SALMON CALCITONIN IN STEROID INDUCED OSTEOPOROSIS

M01RR00334-18                         12/83-11/84 OREGON HEALTH SCIENCES UNIVERSITY                                        1,159,05
22735 ORWOLL, ERIC S                        5,374    BONE DENSITY FUNC IN AGING: COMPUTED TOMOGRAPHY VS TESTOSTERONE & ESTROGEN LEVEL

M01RR00350-18                         12/83-11/84 BAYLOR COLLEGE OF MEDICINE                                               1,135,32
22847 SCHNEIDER, VICTOR S                  67,300    PREVENTION OF DIFUSE OSTEOPOROSIS: FLUORIDE THERAPY

M01RR00585-13                         12/83-11/84 MAYO FOUNDATION                                                          1,122,58
23019 HEATH, HUNTER, III                    1,639    OSTEOPOROSIS
23033 RIGGS, B LAWRENCE                    14,749    OSTEOPOROSIS STUDIES
23034 RIGGS, B LAWRENCE                    61,818    FLUORIDE TREATMENT OF OSTEOPOROSIS
23036 RIGGS, B LAWRENCE                     2,731    METABOLIC STUDIES OF MEMBERS OF FAMILY WITH JUVENILE OSTEOPOROSIS
23038 RIGGS, B LAWRENCE                    16,661    RESPONSIVENESS OF BONE TO PARATHYROID HORMONE IN POSTMENOPAUSAL OSTEOPOROSIS

M01RR00633-12                         12/83-11/84 UNIVERSITY OF TEXAS HLTH SCI CTR DALL                                    1,256,78
23085 PAK, CHARLES Y C                     29,167    MANAGEMENT OF OSTEOPOROSIS ORIGINATING FROM RENAL HYPERCALCIURIA
23105 PAK, CHARLES Y C                     56,594    SODIUM FLUORIDE: USE IN COHERENCE THERAPY OF OSTEOPOROSIS

M01RR00645-13                         12/83-11/84 COLUMBIA UNIVERSITY NEW YORK                                             1,121,26
23179 SHANE, ELIZABETH                      8,058    METABOLIC BONE DISEASE
23180 SHANE, ELIZABETH                      3,453    BONE DENSITY IN AMENORRHEIC WOMEN
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                                             DIVISION OF RESEARCH RESOURCES
                                               OSTEOPOROSIS RESEARCH
                                           1984 SUBPROJECT SUPPORT BY PROGRAM

GRANT NUMBER  PROGRAM DIRECTOR  SUBPROJECT FUNDS          INSTITUTION           CITY             STATE                  TOTAL
SUBPROJ   INVESTIGATOR          BID       DRR              TITLE                                                     DRR AWARD

M01RR00750-12                    12/83-11/84 INDIANA UNIV-PURDUE UNIV AT INDIANAPO
23285 JOHNSTON, C CONRAD,                 34,696    AGE RELATED LOSS OF BONE MASS                                       470,513
23301 JOHNSTON, CYRUS CONR                33,082    STEROID DYNAMICS IN AGE RELATED BONE LOSS

M01RR00827-10                    07/84-11/84 UNIVERSITY OF CALIFORNIA SAN DIEGO
23388 WEISMAN, MICHAEL H                   5,254    RHEUMATOID ARTHRITIS & OSTEOPOROSIS: PIROXICAM TO SUPPRESS RA DISEASE   919,329

M01RR01066-07                    12/83-11/84 MASSACHUSETTS GENERAL HOSPITAL
23825 SLOVIK, DAVID                       21,542    EFFECTS OF HPTH (1 34) & COMBINED SCT ADMINISTRATION ON OSTEOPOROSIS  1,377,104
23848 NEER, ROBERT                        13,939    PATHOPHYSIOLOGY OF AGE RELATED BONE DISEASE
23852 NEER, ROBERT                        56,390    THERAPY OF IDIOPATHIC OSTEOPOROSIS

M01RR01070-08                    12/83-11/84 MEDICAL UNIVERSITY OF SOUTH CAROLINA
23875 ROOF, BETTY S                        8,459    RISK FOR OSTEOPOROSIS AMONG POSTMENOPAUSAL WOMEN                    828,734
GENERAL CLINICAL RESEARCH CENTERS        667,153       28  DRR SUBPROJ                      17   DRR GRANTS
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                                                           BID SUBPROJ                           DRR GRANTS W/BID FUNDS
DIVISION OF RESEARCH RESOURCES           693,744       39  DRR SUBPROJ                      27   DRR GRANTS
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                                                           BID SUBPROJ                           DRR GRANTS W/BID FUNDS
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PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD
1R01AM33066-01		EDWARDS, W THOMAS	BETH ISRAEL HOSP (BOSTON)	$ 100,399
Biomechanics of vertebral fracture in osteoporosis (human)				
1R01AM34257-01		LANG, ROBERT	YALE UNIVERSITY	$ 83,572
New approaches to the treatment of osteoporosis (human)				
2P60AM20557-07	0055	HAWTHORNE, VICTOR M	UNIVERSITY OF MICHIGAN AT ANN ARBOR	$ 63,520
U. of Michigan multipurpose arthritis center-Community component-- Epidemiology of osteoarthritis and osteoporosis (human)				
2R01AM27926-04		GENANT, HARRY K	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	$ 80,151
Vertebral mineral loss in metabolic bone disease (human)				
3R01AM07912-19		HEANEY, ROBERT P	CREIGHTON UNIVERSITY	$ 145,775
Longitudinal study of a pre-osteoporosis population (women)				
5R01AM21190-06		SANDLER, RIVKA B	UNIVERSITY OF PITTSBURGH	$ 192,944
Life styles and bone densities of postmenopausal women				
5R01AM27065-05		RIGGS, B LAWRENCE, JR	MAYO FOUNDATION	$ 158,039
Epidemiology of bone loss, osteoporosis and fractures (human)				
5R01AM28576-04		RIGGS, B LAWRENCE, JR	MAYO FOUNDATION	$ 266,771
Fluoride and calcium treatment for osteoporosis (human)				
5R01AM28583-04		KLEEREKOPER, MICHAEL	HENRY FORD HOSPITAL	$ 231,365
Safety and efficacy of fluoride therapy in osteoporosis (human)				
5R01AM29792-03		GALLAGHER, J CHRISTOPHER	CREIGHTON UNIVERSITY	$ 62,191
Hormone therapy on postmenopausal bone loss (human)				

PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD
5R01AM31844-02		JEE, WEBSTER SHEW S	UNIVERSITY OF UTAH	$ 161,256
Manipulation of bone remodeling in aging (dogs)				
5R01AM32158-02		ARMBRECHT, HARVEY J	ST. LOUIS UNIVERSITY	$ 30,462
Changes in calcium and vitamin D metabolism with age (rats)				
5R01AM32526-02		HEATH, HUNTER, III	MAYO FOUNDATION	$ 102,413
Human calcitonin physiology and bone disease				
			TOTAL NIADDK	$1,678,858
1R01CA37619-01		GREENFIELD, MOSES A	UNIVERSITY OF CALIFORNIA LOS ANGELES	$ 80,632
Osteopenic patients evaluated by ultrasound/photon exams				
			TOTAL NCI	$ 80,632
12P50DE02668-19	XXXX	MECHANIC, G. L.	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	$ 48,000
Biochemistry of avian osteogenic osteoblastoma: in vivo & in vitro				
5R23DE06033-03		KRIBBS, PATRICIA J	UNIVERSITY OF WASHINGTON	$ 47,346
Osteoporosis and oral changes in older women				
1Z01DE00074-12		TERMINE, J D		$ 427,074
Bone and tooth matrix biochemistry and metabolism				
1Z01DE00379-01		YOUNG, M F		$ 306,922
Bone and tooth gene regulation				

PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD
1Z01DE00380-01		ROBEY, P G		$ 396,144
Metabolism of bone cells in vitro				
5P50DE02600-18	XXXX	HOWARD, G.	UNIVERSITY OF WASHINGTON	$ 144,000
The role of repletion and coubling in regulation of bone volume				
5P50DE02670-18		NAVIA, J. M.	UNIVERSITY OF ALABAMA IN BIRMINGHAM	$ 184,000
Nutritional studies on growth, development and oral diseases				
5R01DE06065-04		SCHNEIDER, GARY B	LOYOLA UNIVERSITY MEDICAL CENTER	$ 68,456
The role of lymphoid cells in alveolar bone resorption (rats)				
			TOTAL NIDR	$1,621,942
			TOTAL NIH	'7,036,533

FY 1984 TRANS NIH OSTEOGENESIS IMPERFECTA (EXTRAMURAL)

PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD
2P01AM16516-14		PROCKOP, DARWIN J	UNIV OF MED/DENT NJ-RUTGERS MEDICAL SCH	$ 712,116
Biochemistry of normal and diseased connective tissue				
	0003	PROCKOP, DARWIN J Genetic defects in the biosynthesis of collagen (human)	UNIV OF MED/DENT NJ-RUTGERS MEDICAL SCH	
	0004	BOYD, CHARLES Analysis of procollagen genes in osteogenesis imperfecta (human)	UNIV OF MED/DENT NJ-RUTGERS MEDICAL SCH	

PROJECT	SUB	PRINCIPAL INVESTIGATOR	INSTITUTION	AWARD *
5R01AM32481-03		CLARK, CHARLES C	UNIVERSITY OF PENNSYLVANIA	$ 118,626
Glycosylation of interstitial procollagens (human, chick embryo)				
1K08AM01224-01		TSIPOURAS, PETROS C	UNIV OF MED/DENT NJ-SCH OSTEOPATHIC MED	$ 48,600
DNA analysis for the diagnosis of genetic disorders of collagen (human)				
5R01AM30426-03		ROWE, DAVID W	UNIVERSITY OF CONNECTICUT HEALTH CENTER	$ 89,420
Type I collagen biosynthesis in osteogenesis imperfecta (human)				
5R01AM34075-03		EYRE, DAVID R	CHILDREN'S HOSPITAL (BOSTON)	$ 100,873
Biochemistry and morphology of inborn skeletal diseases (human)				
5F32AM07171-02		BONADIO, JEFFREY F	UNIVERSITY OF WASHINGTON	$ 20,892
Molecular mechanisms of type II osteogenesis imperfecta				
2S07RR05403-23		PUZAS, J EDWARD	UNIVERSITY OF ROCHESTER	$ 4,495
Osteogenesis Imperfecta: Studies on a new bone cell line				
2S07RR05576-20		TSIPOURAS, PETROS	UNIV OF MED/DENT NJ-RUTGERS MEDICAL SCH	$ 791
Osteogenesis Imperfecta Study				
			TOTAL	$1,095,813
1Z01CL06010-04		GERBER, L H		
Study of bracing lower extremities in patients with osteogenesis imperfecta				
1Z01CL07017-01		PIKUS, A		
Audiologic findings in osteogenesis imperfecta				

*Awarded amounts are not available for these Clinical Center projects.

STATEMENT OF JOYCE GRYBOSKI, M.D., MEMBER NATIONAL DIGESTIVE DISEASES ADVISORY BOARD, AND PROFESSOR OF PEDIATRICS, YALE UNIVERSITY

Senator WEICKER. Our next witness is Dr. Joyce Gryboski, member of the advisory board for National Digestive Diseases, and professor of pediatrics at Yale University.

It is a pleasure having you here, Joyce.

Dr. GRYBOSKI. Mr. Chairman, I would like to go through a further identification. The National Digestive Diseases Advisory Board was established in 1980 by Congress in order to implement the recommendations of the commission which issued the report in 1979. As of the moment, the recommendations of the commission, as far as financial support, et cetera, are nowhere near where they should be.

We would like to state that the digestive disease is second only to cardiovascular disease in morbidity in the United States today, and probably with illness and hospitalizations are estimated at $35 to $50 billion a year. So it is an economic burden.

Four million Americans suffer from peptic ulcer disease. It is unfortunate that we have no one symptom or no one disease to call our own. As a matter of fact, in the listing, disgestive disease is not even included in our institute on your paper, but we persist.

We have, since 1977, been working with peptic ulcer disease using Cimetidine, which is a new type of drug which blocks acid secretion and has really significantly cut down on gastrointestinal bleeds and hospitalization of peptic ulcer patients.

Gallstones is another area. Ten percent of the American population have gallstones. We are seeing it now in 6-month old infants. Now they are devising techniques where they can go in with a tube into the common duct and take out the gallstone, and save operations. This is a 3-day hospitalization and back to work with regard to that.

The most important advance in the past few years has been primarily liver disease. Hepatitis B, which affects 5 percent of the world population, and can cause a lethal disease where you are dead in a couple of weeks, or can cause chronic liver disease and cirrhosis, they have now identified and indeed formed a vaccine. With genetic engineering, probably a commercial vaccine will be available in the next few years.

They recently, in our own national institutes of health, found a virus a non-A non-B hepatitis, which is transfusion hepatitis, and similar we can have vaccines for this.

The achievements have been numerous, however, our major concern is, as everyone else's, the funding problem. We are certainly aware of your amendment and we appreciate this greatly and hope that it will go through.

The concerns again is the decrease in the administration proposals from 6,500 to 5,000 grants. Digestive diseases would then suffer new and competing grants, from 800 to 613, which is tragic. We are trying to get young people, good people in the field, and all of these people coming out of medical school now have such financial burdens, there is no secure economic way for them to stay in with guaranteed support.

We are losing our good people.

The budget impact in digestive disease, we have established core centers. This is new for us. There were only three digestive core centers, and last year Congress funded the money for us to add six more. We have a total of nine. In the next budget, we have budgeted, hopefully, for four, but if this cut goes back, we will be able to fund one. One of the old centers is now up for renewal, and if that is renewed, then we will be able to fund no new ones.

So we are nowhere near the level of research centers, core centers that the other institutes have. We recommend maintaining the budget.

PREPARED STATEMENT

Senator **WEICKER**. Thank you very much for your testimony. We will insert your statement in the record.

[The statement follows:]

STATEMENT OF DR. JOYCE GRYBOSKI

I am Dr. Joyce Gryboski, Professor of Pediatrics at Yale University and Cochairman of the Research Subcommittee of the National Digestive Diseases Advisory Board. I am pleased to have the opportunity of speaking to you on behalf of the Board about important accomplishments and opportunities in digestive diseases research.

In establishing the National Digestive Diseases Advisory Board, Congress confirmed the significance of digestive diseases as a major public health issue. Digestive diseases rank second only to cardiovascular diseases as a cause of disability due to illness in the U.S. and are the primary cause of over 190,000 deaths each year. These diseases include more than 40 acute and chronic gastrointestinal conditions, ranging from common illnesses such as heartburn, gallstones, diarrhea, and hemorrhoids to more serious, often life-threatening diseases such as cirrhosis, inflammatory bowel disease, and cancer. Affecting at some time over one-half the U.S. population, they are a leading cause of hospitalization and the primary reason for major surgery in this country. Together, digestive diseases represent 10 percent of the total economic burden of disease in the U.S., estimated to be at least $35 billion and perhaps as high as $50 billion per year.

Congress established the National Digestive Diseases Advisory Board in December 1980 to review and evaluate the implementation of the National Long-Range Plan formulated by the National Commission on Digestive Diseases and to report annually to Congress and the Secretary of Health and Human Services on recommendations for future policies, programs, and budget requirements related to digestive diseases. Meeting at least three times a year, the Board has recommended modifications in digestive diseases plans and programs and has implemented initiatives in its own right. Our third annual report as well as a recent Board publication specifying research advances, opportunities, and needs in digestive diseases have been made available for the subcommittee's use.

Advances in biomedical research, supported largely by the National Institutes of Health, have expanded our understanding of the development of digestive diseases and consequently improved our ability to diagnose and treat these diseases, often preventing recurrence of symptoms or serious complications. Such advances have begun to reduce the burden of morbidity, mortality, and health care costs associated with digestive diseases. For example, approximately four million Americans suffer from peptic ulcer disease. Improved understanding of the role of histamine receptors in this condition led to development of the H-2 blocker cimetidine, which was approved by the Food and Drug Administration for widespread use in 1977. Cimetidine has been shown to be effective in preventing recurrence of peptic ulcer disease. In addition, this and other H-2 blockers have had a significant impact on reducing mortality and medical care costs resulting from this disease by reducing the incidence of complications, including ulcer perforations, and other conditions warranting surgery.

Gallstones are common and present in 10 percent of the population, more commonly in the elderly. Some stones may enter the bile ducts leading from the liver, and some of these stones may obstruct the ducts. This disorder can be associated with dangerous infections. Recently, development and therapeutic use of the flexible, steerable endoscope has reduced the need for surgery and mortality from stone retrieval, in cases where it can be applied. The endoscopic procedure can be performed under local anesthesia in an outpatient facility, and its cost is only about one-third that of stone removal by abdominal surgery. After two days' hospitalization and another three days' recuperation, the patient can return to his usual occupation. In contrast, when treatment of biliary obstruction by abdominal surgery is required, it involves major surgery in an operating room, about 10 days of hospitalization, and about six weeks of recuperation before returning to work.

Investigators studying hepatitis, a liver infection caused by viruses, have given us a means of preventing and controlling this disease. After identifying and studying hepatitis B, one of the viruses which causes hepatitis, investigators developed a vaccine for this virus, which was recently licensed for use. Hepatitis B affects about five percent of the world's population, or about 200 million people, and has been linked to development of liver cancer, probably the most common cause of death from cancer in certain parts of the world. Control and prevention of hepatitis B is therefore an important public health measure.

These and other accomplishments of digestive diseases research, while important in themselves, are generating further opportunities for prevention and treatment. For example, an intramural scientist from the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, recently isolated another virus causing hepatitis, known as the non-A non-B virus. This form of hepatitis is believed to cause chronic liver disease in 40 to 60 percent of those infected and is the most common complication of blood transfusion in the U.S. Studies are needed to find out more about this virus and develop effective preventive measures against the illness it causes. In addition, better and less expensive means of producing a vaccine against hepatitis B are needed to produce the hundreds of millions of doses needed for its control. Investigations need to be undertaken to determine just how hepatitis B infection results in liver cancer, a line of investigation which could have important implications for carcinogenesis in general.

Infectious diarrhea similarly causes sickness and death throughout the world. In the U.S., diarrhea contributes to infant mortality and is second only to the common cold as a cause of time lost from work. Over five years ago, this loss of productivity was estimated to cost $2 billion. Research has led to several effective strategies for anti-diarrheal therapy. For example, oral therapy for the dehydration that can be fatal in severe diarrhea, such as that of cholera, has been proved effective in patients of all ages, including newborns in countries of the developing world and in American Indian populations. This treatment is providing a substitute for intravenous fluid replacement for American children hospitalized with acute diarrhea, at great savings.

Newly-discovered hormones, usually peptides, have been shown to be important regulators of digestive tract function. These hormones, found both in the brain and in the digestive tract or its nervous system, may prove to be the sought-for links between stress factors, the nervous system, and digestive tract function, and perhaps disorders such as functional bowel disease.

These unprecedented achievements and opportunities have resulted from consistent congressional support for digestive diseases research. Increased interest in the field of digestive diseases has been evidenced by the steady increase in the number of applications for funding of digestive diseases research. In the 1980s, however, funding for this field has not kept pace with the increased rate of high quality applications being submitted or with the increasing cost of research due to inflation. Recent budget proposals from the Administration would reduce available resources even further.

As part of the Administration's proposed budget for fiscal year 1986, a significant portion of the congressionally appropriated fiscal year 1985 budget would be reserved to "forward fund" the second and third year of new grants. While the congressional appropriation for 1985 would have supported 6,500 awards NIH-wide for new and competing research grants, the Administration's proposal provides for only 5,000 in 1985 and 1986, a reduction of 23 percent. For the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK), the lead institute for digestive diseases research, the number of new and competing grants which could be funded would be cut from 800 to 613, a loss of 187 awards. This loss would have a devastating effect not only on the momentum of current research, but on the course of biomedical research for years to come.

Research grant applications are ranked from 100 to 500, with the highest possible score being 100. A score of 225 or better (that is, lower than 225) is generally considered to reflect excellent quality. Under the congressional appropriation for fiscal year 1985, NIADDK would have funded approved grants to a priority score of approximately 170. Under the Administration proposal, the priority score cut-off will be 150 to 160, the lowest level in the history of the Institute. Many of these unfunded grants are from talented new investigators applying for their first research grant. We have worked long and hard to attract such individuals to digestive diseases research. Some of these scientists may be forced to abandon research careers. Other of these superior applications are from eminent investigators with a long history of contribution to the field. These scientists may no longer be able to keep a functioning laboratory. This situation threatens to deprive future generations of researchers of stimulating training environments and discourage yet others from pursuing research as a career. We all stand to lose from such an outcome.

The proposed budget would have a particularly adverse impact on the new congressionally-authorized program of Digestive Diseases Core Centers.

This program, initiated by the NIADDK in fiscal year 1984, enables clinical and basic scientists to join together in a coordinated multidisciplinary approach to the complex research problems posed by digestive diseases. Centers have already been established which specialize in the study of liver diseases, normal and abnormal motility of the digestive tract, diarrhea, gastrointestinal hormones, and functional morphology of the digestive tract. The fiscal year 1985 appropriation provided funding for four additional digestive diseases research centers. Eight applications have been submitted for these awards, two of which are in the important area of inflammatory bowel diseases. Under the proposed revised budget, however, the Institute will probably be able to fund only one. It is essential that this fledgling program be funded as originally specified by Congress.

Another important initiative worthy of continued congressional support is the digestive diseases data system. This system will focus on nomenclature and definitions, incidence and prevalence, risk factors, and prognostic and diagnostic factors relevant to the spectrum of digestive diseases. As one aspect of this system, NIADDK plans to establish a research data base on patients who have been evaluated for or have received a liver transplant. This data base will be valuable as a means for improving both patient selection and the results of liver transplant operations. The planned timing of establishment of the data base is favorable, because liver transplantation, essentially done until now by only one American surgeon, is now beginning to expand to other institutions. Appropriate funding of this newly initiated program will not be possible under the proposed Administration budget.

Recommendations

The Board recommends appropriations for the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, the lead agency for research in digestive diseases, of a minimum of $638 million for fiscal year 1986. This level will restore proposed reductions in new and competing grants, restore funding for Centers, and restore funds for intramural research. The Board also recommends that the Administration allow NIH to pay in fiscal year 1985 the number of new and competing awards specified in that year's congressional budget justification.

The Board further recommends that additional funds be designated to continue the development of the newly established program of Digestive Diseases Centers, to allow their development to a level comparable to centers in arthritis and diabetes. Specifically, the Board recommends that $10 million be appropriated for this purpose.

The Board also recommends that an additional $2 million be appropriated for the Digestive Diseases Data System.

We appreciate your support for digestive diseases and your efforts to improve the nation's health. Thank you for the privilege of appearing before your Subcommittee. I will be pleased to respond to any questions you may have.

Senator WEICKER. Our mutual friend Brian Gaffney told me to expect you, and I must confess that my opinion of Brian has gone up a thousand fold. Usually he doesn't consort with such cerebral types as you, but friends like John Doyle. It is a great pleasure to have you here.

You might also tell Brian that since he was Reagan's campaign manager in Connecticut, he might call the President on this budget also.

Dr. GRYBOSKI. I met him and scolded him on the church steps.

STATEMENT OF BARBARA A. MATIA, PATIENT, DR. McPHERSON BROWN

Senator WEICKER. Ms. Barbara Matia, and Dr. Brown.

Ms. MATIA. Dr. Brown did not arrive. Myra Frank, one of his patients, is here in his place.

Senator WEICKER. Barbara, you and Myra Frank are both patients of Dr. McPherson Brown. Is that correct?

Ms. FRANK. Dr. Brown is here, but I am going to take his place.

Senator WEICKER. Fine, you go right ahead.

Ms. MATIA. Mr. Chairman, I appreciate the opportunity to appear before you for the second time.

It is hard for me to believe that the program that brought me from being bedridden as a result of rheumatoid arthritis to being fully functional in 6 years is still not widely available to the 37 million arthritics in our country today.

Three significant developments have occurred since I have been here last year. First, Dr. John T. Hicks, a noted rheumatologist, has joined the Arthritis Institute because of the promise he feels Dr. Brown's work holds for relieving the suffering of arthritics. Immediately prior to joining the Arthritis Institute, Dr. Hicks served in the rheumatology/immunology division of the Smith Kline Beckman Corp., where he was responsible for large scale, controlled trials of oral gold therapy in over 1,000 arthritics at over 100 different clinics. Thus, he is experienced in developing, organizing, and directing clinical trials of long acting drugs in double-blind controlled comparison studies.

The second significant event is the completion of evaluation of the Arthritis Institute's patient records by an independent biostatistical firm of national reputation. Using 98 patients as the control group, this retrospective study indicated that after 5 years of treatment, over 70 percent of the control group were still benefitting from antibiotic therapy, a percentage far higher than with other treatment programs.

The study concludes that in spite of the results noted in the 1971 Boston study, among others, a properly designed and managed clinical trial of the Antibiotic Treatment Program is in order at this time.

The third significant development is that a grant application has been filed and is now pending at the National Institutes of Health requesting approximately $2.2 million for a 1-year clinical trial which will compare the Antibiotic Treatment Program to gold therapy as a treatment for rheumatoid arthritis.

Based upon my experience over the last 3 years of discussing the Antibiotic Treatment Program with the medical establishment, I believe that it will take the involvement of this subcommittee to make sure that the opportunity before us is not snuffed out by the peer review committees.

The filing of the grant application calls for a political decision, not a medical decision. The political decision is whether this subcommittee thinks that 36 million arthritics are worth 2 cents per year over the next 3 years, which could potentially lead to the availability of the best treatment program for arthritis yet known.

It is the clinical trial which will provide the medical decision. If the peer review committee turns down the grant on the basis of earlier trials improperly conducted, or if this grant is not made for whatever reason, we may have missed one of those rare opportunities in the history of mankind to positively affect the human condition.

When you consider that the amount requested is only 6 cents per arthritic, can we afford not to permit this trial to be conducted?

Let us all stay involved in the processing of this application so that we can put this program to the test. This could be the best 6 cents the Federal Government has or will ever spend on me.

Thank you very much.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony. We will place your submitted statement in the record at this point.

[The statement follows:]

Statement of Barbara A. Matia

I appreciate the opportunity to appear before you for the second time.

It is hard for me to believe that the program that brought me from being bedridden as a result of rheumatoid arthritis to being fully functional in six years is still not widely available to the 37 million arthritics in our country today!

As you may remember from my testimony last year, the program I am talking about is a treatment program for arthritis developed by Dr. Thomas Brown of The Arthritis Institute of the National Hospital which uses antibiotics in conjunction with anti-inflammatories. As you may also remember, I told you that Dr. Brown told me the first time I met with him that I would be getting worse for a period of time and would then begin to improve each year thereafter as long as I remained on the program. It was actually because I worsened, as predicted, that I sensed this doctor was actually tinkering with the disease process that had made me feel so ill. The fact that this doctor had the confidence to tell me that I would be getting worse before I got better and the fact that that actually occurred showed that there was real significance to this program.

This is a program that arthritics travel from all over the United States and the World to receive; that patients are willing to wait more than six months to a year to receive for the first time; that the International Congress of Rheumatology selected for presentation at their annual meeting in Sydney, Australia later this month; that is safer and more effective over a long term, without toxicity than any other treatment currently available; and that could lead us to a breakthrough to the cure for arthritis.

Three significant developments have occurred since I was here last year. Dr. John T. Hicks, a noted rheumatologist, has joined the Arthritis Institute because of the promise he felt Dr. Brown's work holds for relieving the suffering of arthritics. Immediately prior to joining the Arthritis Institute, Dr. Hicks served in the Rheumatology/Immunology Division of the Smith Kline Beckman Corporation where he was responsible for large-scale, controlled trials of oral gold therapy in over 1,000 arthritics at over 100 different clinics. Thus, he is experienced in developing, organizing and directing clinical trials of long acting drugs in double-blind controlled comparison studies.

The second significant event since I testified before you a year ago was the completion of an evaluation of the Arthritis Institute's patient records by an independent biostatistical firm of national reputation. Using 98 patients as the control group, this retrospective study indicated that after five years of treatment, over 70% of the control group were still benefitting from antibiotic therapy, a percentage far higher than with other treatment programs. Although this study was requested and paid for by the Arthritis Institute, no control of the study was exercised by the Arthritis Institute. The study concludes that in spite of the results noted in the 1971 Boston study, among others, a properly designed and managed clinical trial of the antibiotic treatment program is in order at this time.

The third significant development since I last appeared before you is that a grant application has been filed and is now pending at the National Institutes of Health requesting approximately $2.2 million for a one-year clinical trial which will compare the antibiotic treatment program to gold therapy as a treatment for rheumatoid arthritis. Based upon my experience over the last three years discussing the antibiotic treatment program with the medical establishment, I believe that it will take the involvement of this subcommittee to make sure that the opportunity before us is not snuffed out by the peer review committees. The filing of the grant application calls for a political decision, not a medical decision. The political decision is whether this subcommittee thinks the 37 million arthritics are worth 2.2 million dollars which could potentially lead to the availability of the best treatment program for arthritis yet known. It is the clinical trial which will provide the medical decision! If the peer review committee turns down the grant on the basis of earlier trials improperly conducted, or if this grant cannot be made because of cuts in funding, we may have missed one of those rare opportunities in the history of mankind to positively affect the human condition. When you consider that the amount being requested is only approximately six cents per arthritic, can we afford not to permit the trial to be conducted?

To the arthritics in this country, this grant could mean the difference between just coping and a full life, pain and no pain, crippling and no crippling, and despair and hope.

Let us all stay involved in the processing of this application so we can put this program to the test! This could be the best six cents the federal government has or will ever spend on me!

Thank you very much.

STATEMENT OF MYRA FRANK, PATIENT, DR. McPHERSON BROWN

Senator WEICKER. Myra Frank.

Ms. FRANK. Mr. Chairman, I was diagnosed as having severe rheumatoid arthritis at the age of 12. Up until that time in my life, I guess you could say I had the world by the tail. You know how it is when you are a kid. You have your whole life ahead of you, your hopes and dreams, hardly a care in the world. For me, it was better because I was very athletic, my grades were good, and I was extremely competitive. I hated to lose to anyone at anything, and I seldom did. I was very confident in myself. As a result, I was probably one of the most popular kids in my class. Hardly one you would expect to fall prey to such a crippling disease.

I wasn't about to give up, though. I expected some pain now and then, but I had no idea what the disease was capable of doing to my body and my mind. In the beginning, I tried everything to stop the terrible pain and progressive crippling. I was put on cortisone, gold, plaquenil, penicillamine, all standard medically approved treatments for rheumatoid arthritis. But being medically approved doesn't necessarily mean that it is safe.

I didn't realize that there could be something worse than the extreme pain I was already experiencing, the side effects. By the time I found this out, it was almost too late. The drugs that had helped me in the beginning took control of my body, and actually appeared destined to finish me off.

The side effects were unbelievably worse than the disease itself, but at this point I no longer cared. I spent most of my time in bed because there was little else I could do.

Those years taught me a lot. They taught me to be scared. They taught me to be weak and dependent on others. They taught me to know when I had been beaten. It was easy to learn, but very hard to swallow. After 8 years of fighting I could fight it no longer.

It is hard to explain the terrible pain and the sense of hopelessness. Picture how you would feel to have the people you care most about, your family and friends, the people who love you and respect you, watch you being reduced to a useless cripple, someone who needs assistance with even the most menial tasks. That is where I was and I have to tell you, it is a terrible place to be.

Day-by-day, you get worse and you know you are getting worse. Your family can't help you and they will try so hard. Worse of all, you can't help yourself. It isn't fair to you or to those around you.

That is where I was when I went to Dr. Brown. I was a long way from the girl who had held the world in the palm of her hand. My confidence was all gone along with my hopes and dreams.

It has been 6 years since my first visit to Dr. Brown and the beginning of a whole new life. My future is once again open to dreams. But there are a lot of people out there suffering from rheumatoid arthritis. Granted, the severity of the pain and crippling varies, but the point is that it doesn't have to be that way.

Many of these people will try the same drugs I did and possibly develop severe side effects, a chance they don't have to take. I am asking your support of the grant recently submitted for a clinical trial of Dr. Brown's antibiotic treatment program, a program I know is right because I have been there. Give victims of arthritis a future they can look forward to.

Thank you.

Senator WEICKER. Thank you very much. We greatly appreciate your testimony. It was very moving. We will certainly keep it very much in mind.

STATEMENT OF FREDERICK C. McDUFFIE, M.D., SENIOR VICE PRESIDENT, MEDICAL AFFAIRS, ARTHRITIS FOUNDATION

Senator WEICKER. The next witness is Frederick C. McDuffie, senior vice president, medical affairs, Arthritis Foundation, Atlanta, GA.

Dr. McDUFFIE. Thank you, Senator. I am Dr. Fred McDuffy, senior vice president of the Arthritis Foundation, which represents the interests of 37 million people with arthritis in the United States, a leading cause of disability, and costs of about $10 billion a year.

The solution to arthritis, like all of the other diseases we have been hearing about, is going to come about through intensified medical research. We are recommending, for the 1986 fiscal year, an NIADDK appropriation of $650 million for the arthritis program, $127 million, which represents about 19 percent increase, slightly below the overall administration budget of 22 percent.

We are justifying this not only because of the magnitude of the problems that arthritis represents, but because of the recent advances in research which offer so much hope that we are going to do a lot more for people in the future.

Certainly, the biggest advance that we have seen is the close tie-in between certain genes that control immune responses and certain types of infections. For example, in Reiter's disease, a gene called B–27, controls the ability of certain bacteria, salmonella, and urysenia to produce this type of arthritis. We suspect that the same thing is true in spondylitis—a type of arthritis of the spine—which affects mostly young men, and similarly in rheumatoid arthritis, a much more common disease that cripples 2 million Americans—here we have identified a gene, but we haven't found an infection yet.

The example that you are probably familiar with, the Lyme disease in Connecticut, which is practically epidemic in some areas of the State, it was found that a tick bites, usually children, and transmits the bacterium. Now this has been identified, it is possible to treat this disease, which affects not only joints, but the heart, the brain, and other organs, successfully. We think that this may be a model for rheumatoid arthritis in some of the more common types.

Surgical advances have been extremely important in the last 10 or 15 years. Joint replacement has put a lot of people back on their feet. The problem is that after about 10 years, they begin to slip. So the orthopedists are developing and working on new types of prostheses that don't require glue, in which the bone can grow and stabilize. This is an important area of research.

I just want to spend a couple of minutes, the last bit, stating that we want to emphasize this year one new program that the NIADDK would like to do, and that is develop in arthritis some specialized centers of research. Through the efforts of our foundation, the NIH, and other organizations, within various medical institutions throughout the country, groups of various disciplines have now been developed that are capable of interacting together to focus all of their attention on certain of these problems.

So we are recommending $800,000 apiece for three SCOR programs, one in rheumatoid arthritis, which we think is near solution; one for osteoarthritis, the most common type of arthritis that affects so many of our elderlies of the benefits of their retirement; and osteporosis, which Mrs. DeVito has already talked about, and which causes over 200,000 fractures a year, with about a 20-percent mortality—only one-third of these people ever get back to their original activities.

We feel that the Senate has a great opportunity to do a lot for this problem this year, and we appreciate it very much. Thank you.

PREPARED STATEMENT

Senator WEICKER. Doctor, thank you very much for your testimony. Your submitted statement will be placed in the record at this point.

[The statement follows:]

Statement of Dr. Frederick C. McDuffie

Mr. Chairman and members of the Subcommittee, my name is Frederic C. McDuffie, MD. I am Senior Vice President for Medical Affairs of the Arthritis Foundation, the national voluntary health agency concerned with research, professional training, public education, and services for the nation's 38 million Americans with arthritis.

The term arthritis is a comprehensive one. Within its aegis are as many as 150 distinct disease entities. Some of the better known of these are rheumatoid arthritis, osteoarthritis, gout, systemic lupus erythematosus, and scleroderma. Arthritis is the nation's number one chronic disabling disease.

Its costs in both human and economic terms are staggering. Although cost estimates vary in accordance with the elements used, one prominent epidemiologist estimates the 1983 cost of arthritis and back pain at $25 billion. This figure includes hospitalization, physician services, drugs, and other medical expenses. It also includes lost wages and the value of homemaker services, and the loss due to premature death. It does not include Social Security disability payments, welfare costs, reduced tax payments, or so-called "third tier" economic effects. A million new arthritis patients are added to the total every year. By the year 2,000 arthritis is expected to drain the economy of nearly $100 billion annually.

The health burden, the costs, and the complexities of the many diseases that comprise arthritis demand that more be done now to accelerate the research efforts underway to find causes, treatments, and cures for rheumatic diseases.

Many important findings over the past decade, and the recent expansion of knowledge in a variety of scientific endeavors relating to arthritis have encouraged researchers to believe that with strong support through NIH, major advances will be made in our understanding of various forms of rheumatic disease in the near term. For example, recent research indicates strongly the presence of certain infectious agents which affect a specific gene in persons with Reiter's Disease; the same gene is found in ankylosing spondylitis patients, although it is suspected that infectious agents other than those in Reiter's trigger this disease. The cause of Lyme arthritis - infection from a geographically specific wood tick - was found, the disease isolated, and a cure (penicillin) identified. A new experimental mouse model has been developed in which the initial lesion in rheumatoid arthritis is a proliferation of synovial cells. Osteoarthritis is now known not to be merely "wear and tear" in older people; newly found protein factors cause abnormal cartilage cell behavior. Gout has been controlled. Genetic markers have been identified for a number of rheumatic diseases.

The Arthritis Foundation supports increased funding for the National Institutes of Health generally, and wishes to address more specifically the funding needs of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases(NIADDK). Within that research institute, we will focus particular attention on the importance of continuing a strong arthritis, musculoskeletal and skin disease program, and will urge the Committee to fund an exciting new initiative in this field.

Before I address the appropriation for FY 1986, I must express the deep concern of the Arthritis Foundation and its professional organizations, the American Rheumatism Association and the Arthritis Health Professions Association on the unilateral reduction in new research grants imposed on NIH by the Office of Management and Budget for FY 1985.

We, along with scores of other voluntary health agencies and professional societies, view the reduction of new grants from 6,500 to 5,000 with the utmost alarm. For NIADDK this means a reduction of 187 new grants, from 800 to 613, and a 10 percent reduction of research centers. We recognize, parenthetically, that the White House, OMB, and the Senate Republican leadership have agreed to increase the new RO-1 grant level from 5,000 to 5,500 for FY 1986. It is not at all certain that this level will be included under the enacted Concurrent Resolution on the budget. Even if it were, there are two major problems: first, nothing will have been done to restore the grant levels appropriated for FY 1985; second, the 5,500 base proposed is not adequate if we are to rebuild the momentum of biomedical research necessary for long range stability and success in finding causes, cures, and improved treatment for the serious diseases and conditions that so heavily burden our nation's health.

The OMB decision does not stabilize the research effort, as has been claimed by some Administration spokesmen; on the contrary, the grant reductions will seriously destabilize and discourage exemplary research throughout the country in all biomedical research fields. Within NIADDK, it is estimated that the percentage of approved grants that can be funded will drop precipitously from a meager 30 percent to 18.5 percent, and a payline of 150. This contrasts with the 50 percent funding of earlier years, with a payline of 200 or higher.

This erosion of the nation's ability to fund good research has dangerous portent for the long term as well as the short. Good scientists will not be drawn to a research environment in which there is a less than one in five chance of having their projects funded. Scientific capability in this country will inevitably atrophy. We urge the Congress to maintain the new grant level for FY 1985 at 6,500 and to continue funding for the same number of grants for FY 1986.

We believe NIADDK should receive funding of $650 million for FY 1986. This represents an increase of about 19 percent over the FY 1985 level, a percentage below the projected R and D increase for Defense; and somewhat over the improvement level identified for all research and development in the President's FY 1986 budget.

The amount we recommend for NIADDK is slightly above that of the NIADDK coalition of organizations. We urge the additional amount so that the Institute may address one of Secretary Heckler's three research priorities, arthritis. A total program level of $127 million would be reasonable and appropriate for the Division of Arthritis, Musculoskeletal and Skin Diseases, or about 20 percent of the NIADDK total. This amount would provide a 15 percent increase in funds available for RO-1s;

stabilization of Multipurpose Arthritis Centers; and new funds for Specialized Centers of Research.

As their name implies, Specialized Centers of Research, or SCORs, are focussed research mechanisms which offer an opportunity to converge the scientific efforts of investigators in several areas; for example, a single SCOR may involve experts in biochemistry, genetics, connective tissue chemistry, and bioengineering, all of whom will focus on specific disease entitites or discrete questions relating to such an entity.

In order to target research on the diseases representing the greatest health burden in the arthritis and musculoskeletal disease field, we urge this Committee and the Congress to fund three SCORs in each of three research areas: rheumatoid arthritis, osteoarthritis, and osteoporosis. The cost, at approximately $800,000 per center, would be $7.2 million. The SCOR concept has been applied with great success in the National Heart, Lung and Blood Institute. Because of the explosion of knowledge that has taken place in the arthritis and musculoskeletal disease fields, and because of the great potential now available for research advances, the time is right to focus research through the SCOR mechanism.

SCORs will stimulate wider research interest in the selected priority fields, and will complement investigator-initiated research projects. A multidisciplinary team approach, with close collaboration between basic scientists and clinical investigators, will speed clinical applications of advances in basic science.

Attached to this statement is a fact sheet subscribed to by the principal organizations in the arthritis, musuloskeletal, and skin disease fields for the Committe's review. I will be pleased to respond to any questions the Committee may have.

Thank you.

FACT SHEET FY 1986

Appropriations for the Arthritis, Musculoskeletal and Skin Division
National Institute of Arthritis, Diabetes, and Digestive
and Kidney Diseases.

The President's proposed budget for the National Institutes of Health for Fiscal Year 1986 comes at a time when our nation's biomedical research scientists are accumulating knowledge exponentially in the pathology and etiology of man's most serious diseases. Nowhere is this advancement more apparent than in the fields of arthritis, musculoskeletal, and skin diseases.

For example, scientific discovery has brought researchers to suspect infection as a cause of rheumatoid arthritis. New treatment for this form of disease includes the use of methotrexate, a cytotoxin; lymphopheresis, and chemical synovectomy. A variety of discoveries relating to antibodies in lupus patients is increasing understanding of that disease. Monoclonal antibodies are being used to pinpoint lesions in several skin diseases. New knee replacement designs, and techniques for replacement of other joints, have been developed.

Recommendations

The major professional and voluntary organizations in the fields of arthritis, musculoskeletal and skin diseases support an overall FY 1986 appropriation for the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) of $650 million, or 19 percent above the appropriated FY 1985 level. This is a reasonable increase, in light of the President's overall R&D increase of 22 percent. The proposed amount is somewhat higher than that recommended by the NIADDK coalition. We believe the additional amount should be used to accommodate Secretary Heckler's research priority in arthritis (the other priorities are AIDs and Alzheimer's Disease).

For the Arthritis, Musculoskeletal, and Skin Division we recommend total program funding of $127 million, which is a level necessary to allow our scientists to begin truly to take advantage of the research advances made in the last few years, and to provide for an exciting initiative: Specialized Centers of Research (SCORs).

The National Heart, Lung and Blood Institute has utilized the SCOR concept with great success. It is time to adapt this research tool in the arthritis and musculoskeletal area. We propose major research thrusts to address three diseases which represent great health burdens to the American people: rheumatoid arthritis, osteoarthritis, and osteoporosis.

Under the President's Budget, assuming a ceiling of 5,000 new NIH grants, only 18.5 percent of approved grants in NIADDK could be funded. We are assuming, for purposes of this Fact Sheet, that Congress will require the grant levels it approved in the FY 1985 appropriation, and that this level will represent the base for considering the FY 1986 request.

We are concerned about two additional issues: training, and levels of personnel at NIADDK. A reasonable level of scientist training is essential if the United States is to continue to be preeminent in biomedical research. The currently anticipated level of support for research training is inadequate; the level we propose will ameliorate the critical limitation on trainees under the AMS Division. Similarly, the proposed cut in FTE (full time equivalent) positions at NIADDK must not be permitted. The institute historically has been "lean" in personnel; the conferring of Bureau status upon NIADDK did nothing to improve the scientific capacity of the Institute. The proposed staff reduction would have a detrimental effect upon the intramural program and program management.

Programmatic Breakdown
Recommendations for FY 1986

Research projects (RO-1)	$ 86.0
Centers (MAC)	11.0
Specialized Centers of Research	7.2
RCA/other research	3.6
Training	8.0
R&D contracts	2.2
Intramural research	9.0
Total Program	$127.0

We propose an increase of $11 million for RO-1s (15%). This amount would provide current services funding, plus a modest expansion of grants. Center funding has been eroded over the past several years; the proposed level would permit continuation of current services. Under the new SCOR program three SCORs, at $800,000 each, would be established in each of the target fields of research. In the categories of RCAs and other research and R&D contracts, funding would be provided at current services levels. Finally, the importance of intramural research is underscored by the proposed increase of $2 million, an amount which would accelerate important current research efforts.

STATEMENT OF RONALD LAMONT-HAVERS, M.D., NATIONAL ARTHRITIS ADVISORY BOARD

Senator WEICKER. Next we have Dr. Ronald Lamont-Havers of the National Arthritis Advisory Board.

Dr. LAMONT-HAVERS. Mr. Chairman, I am R.W. Lamont-Havers, director of research at Massachusetts General Hospital, and the past vice chairman of the National Arthritis Advisory Board, appearing today on behalf of Dr. Klinenberg, who is the chairman of the board, and could not be present.

Mr. Chairman, I would like to depart from my text for a moment just to thank you for your efforts. Coming from an institution in which I have never seen as much confusion and disheartenment with regard to funding of research, your actions have certainly brought a ray of light and hope to that, which we hope will be sustained for the rest of the fiscal year.

The National Arthritis Advisory Board was formed by the National Arthritis Act which was passed by Congress just a decade ago. I think a great deal has been done since 1975 and the formation of the board since then. Part of that was the formation of an arthritis plan which outlined the recommendations for basic and clinical research which could be accomplished. As a result of that, a report of the board has been given to Congress every year since that, and I think that the 1984 annual report has been made available to your committee.

We also published in 1984 a companion report on initiatives for arthritis, progress, and future directions, which summarizes the progress in implementing the arthritis plan over the previous 8 years. This is identifying the future needs and recommending programmatic initiatives so that we do have something to follow along in the future.

I think that Dr. McDuffie certainly has outlined some of the advances which have been accomplished in arthritis which makes this a very active field to work in at the present time in research. I might say that Lyme arthritis has been particularly interesting to me also since a member of my immediate family managed to contract the disease in Essex, CT. So I am very well aware of that syndrome, and the fact that there are effective treatments which have been coming out through work at Yale.

The work in systemic lupus, we know about, and scleroderma and in many of the other illnesses, has been very effective.

I would like to turn my attention, however, to the specific recommendations of the National Arthritis Advisory Board made in its 1984 annual report.

They recommended that it was important that the percentage of regular research grants to be funded could be at least increased. Certainly, the 18-percent level which the NIADDK is presently funding at has caused utter disaster. We would hope that this would come up through the years back to the 47 percent.

The most important initiative in the request by the board this year is to seek and obtain congressional support to establish specialized centers of research [SCOR's] in the field of arthritis and related diseases of primary importance. The board is convinced that these specialized centers will provide an extraordinarily effective means of concentrating research personnel, and resources on such dramatic diseases of national importance such as rheumatoid arthritis.

These centers are multidisciplinary, and they have shown their effectiveness in the programs that are presently supported by the National Heart, Lung, and Blood Institute. The other programs are equally important with regard to the continued support of the multipurpose arthritis centers, the training, and the Cooperative Clinical Trials Program.

Looking to the future, it is vital that advantage be taken of opportunities provided by the current exciting research advances in arthritis and related musculoskeletal diseases. This momentum must not be allowed to dissipate itself, and research scientists addressing these distressing and disabling diseases must be maintained and encouraged in pursuing their important activities.

Mr. Chairman, thank you very much.

PREPARED STATEMENT

Senator WEICKER. Dr. Lamont-Havers, I thank you very much for your testimony. We will place your statement in the record.

[The statement follows:]

STATEMENT OF DR. JAMES R. KLINENBERG, CHAIRMAN, NATIONAL ARTHRITIS ADVISORY BOARD

I am James R. Klinenberg, Professor and Chairman of Medicine at Cedars-Sinai Medical Center, and Chairman of the National Arthritis Advisory Board. I appreciate the opportunity to appear before you to present the recommendations of the National Arthritis Advisory Board.

Disorders of the joints and connective tissues afflict more than 35 million Americans, or 1 in 7 of all our people. More than 150 different disorders of the joints and connective tissues are categorized under the broad term "arthritis," a group of chronic diseases that is the Nation's leading crippler. Although the prevalence of arthritis is higher among older persons, an estimated 250,000 children have juvenile arthritis, which, in addition to causing pain and swelling of the joints, can retard growth and lead to early blindness, kidney disease, or death. Arthritis in children is, in fact, more prevalent than was paralytic poliomyelitis during the most severe epidemics of the past. Most forms of arthritis are chronic, and many patients unfortunately require lifelong medical care.

The cost each year of hospital care, professional services and drugs for arthritis and the loss of productivity from arthritis is estimated at $18.6 billion. These costs continue to rise each year.

Congress passed the National Arthritis Act in 1975, recognizing arthritis and musculoskeletal diseases as major health problems and the greatest single cause of chronic pain and disability. The Act established a National Arthritis Commission to survey activities relating to arthritis and to formulate a long-range plan to combat these diseases. The Commission submitted to Congress in 1976 its recommendations for action, The Arthritis Plan; it contained over 150 recommendations concerning basic and clinical research, comprehensive arthritis centers, education, community programs, data systems, epidemiology and other special activities. That same year, 1976, Congress enacted P.L. 94-562, which formally established the National Arthritis Advisory Board. The Board's purpose is to monitor the implementation of the Arthritis Plan, to recommend any changes in the Plan, and to propose to Congress and the Administration appropriate guidelines, policies, and procedures for Federal programs relating to arthritis. The membership of the Board comprises 24 persons, who represent a broad spectrum of public, private, and individual concern with the problems of arthritis.

The Board meets at least four times per year to review progress and discuss program directions. In the course of these deliberations, the Board has recommended improved program approaches to the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK), the lead Institute for these diseases, as well as other Federal, state and private groups. We were pleased to present to you our most recent Annual Report for the subcommittee's use as it considers appropriations for research in arthritis and related diseases. The Board also published a companion report, "Initiatives for Arthritis: Progress and Future Directions" in 1984, summarizing progress in implementing the Arthritis Plan over the previous eight years, identifying future needs, and recommending programmatic initiatives.

Highly significant advances in biomedical research supported by the NIADDK and other Institutes at the NIH have given us greater understanding of the causative mechanisms in some of the rheumatic diseases and have provided new approaches to the treatment of rheumatic diseases. In rheumatoid arthritis, for example, specific agents have recently been found that may initiate or trigger the disease: these include parvovirus and EB virus. Moreover, only certain individuals, who are susceptible to rheumatoid arthritis by their genetically determined immune responsiveness, go on to have the chronic and active inflammation of rheumatoid arthritis. We are learning much from research on newly-developed animal models of arthritis. In addition, we are gaining important information from a new human model of arthritis, Lyme arthritis, discovered just 10 years ago. This arthritis has been recently found to be caused by a spirochetal bacteria, similar to the one causing syphilis, and can be effectively treated by antibiotics such as penicillin.

Research on systemic lupus erythematosus (SLE), a serious disease primarily of young women, continues to be active and productive. More is being discovered about abnormal immunoregulation in SLE; a new defect in complement receptors on cells in lupus patients may turn out to be inherited. Dietary manipulation can alter SLE in experimental models in inbred mice; nonsaturated fatty acids may inhibit the disease-producing immune reactions in these SLE mice. Hormonal regulation has also been shown to be important in SLE, and may now explain the predominance of SLE in women.

Scleroderma is another serious connective tissue disease, affecting middle-aged women and men. It is now clear that very small blood vessels are important in pathogenesis of scleroderma at a primary level. Studies are needed to link the vascular abnormalities and the fibrotic responses in scleroderma. New models, such as the tight-skin mouse, have been created for such studies. Research is also needed in the biology of endothelial cells (of small blood vessels) and the roles of histamines and kinins on the endothelial cells, as well as potentially therapeutic agents that can block these reactions.

There is much research potential with respect to the spondylitic group of rheumatic diseases, ankylosing spondylitis (spinal arthritis), Reiter's disease and the others. These are diseases largely of young men. Several possibly causative microorganisms, such as Chlamydia and Klebsiella, have been reported to be connected with the development of these diseases. The role of the special tissue antigen, HLA-B27, in spondylitis needs to be discovered, as do the reasons for predominant maleness in this disease.

Osteoarthritis, the most common form of arthritis affecting 16 million people in the United States, one of the most disabling and crippling diseases in older populations, has been a difficult disease to study. Two recent research developments are encouraging in looking forward to major advances in our knowledge of osteoarthritis. The first are recent biochemical observations indicating that chondrocytes, the cartilage cells, produce both the substances that build the cartilage and the substances that destroy it; perhaps we will find out why cartilage is unable to repair itself, once damaged, and to discover new ways to induce this repair. Secondly, several good experimental models of osteoarthritis have been developed recently, offering the hope for new knowledge concerning cause and new treatments for this disabling disorder.

Remarkable advances in reconstructive surgery for osteoarthritis and rheumatoid arthritis have been made during the past decade. Improvement has been achieved in total joint replacements for destroyed hips, knees, shoulders, elbows and wrists. These results have been achieved by combined research efforts of bioengineers, materials scientists and orthopaedic surgeons. Loosening of the joint implant after several years remains a problem. The future holds promise for the development of implants that will provide normal joint function over an indefinite period.

The level of enthusiasm about research on the rheumatic diseases is at an all-time high. New leads are emerging along many investigative fronts. Moreover, the availability of new biomedical research technologies, such as monoclonal antibodies, recombinant DNA, molecular genetics and computers, is accelerating the pace with which major scientific discoveries can be achieved.

Recommendations

In order to take advantage of these important research opportunities, the National Arthritis Advisory Board recommends in its 1984 Annual Report (see Table 1 on page 2) that Congress appropriate $99,040,000 in Fiscal Year 1986 for investigator-initiated research grants for the Division of Arthritis, Musculoskeletal and Skin Diseases, NIADDK. This will permit funding of just under half (47 percent) of the scientifically-approved research grant applications considered by experts to be meritorious.

The most important initiative and request by the Board this year is to seek and obtain Congressional support to establish Specialized Centers of Research (SCORs) in the field of arthritis and related diseases in priority areas of national importance. The Board heard testimony from the National Heart, Lung and Blood Institute (NHLBI) of the clearly demonstrated success over the past decade of their SCORs programs in hypertension, arteriosclerosis, thrombosis, et. al. The Board is convinced that similar Specialized Centers in selected rheumatic diseases will provide an extraordinarily effective means of concentrating research personnel and resources on rheumatic diseases of national importance, such as rheumatoid arthritis, osteoarthritis, and osteoporosis. Specialized Centers of Research are multidisciplinary, having both basic science and clinical research emphasis, ensuring that advances in basic science are rapidly translated into clinical application, and clinical needs provide the direction for the basic science. SCOR programs provide an important addition to investigator-initiated research projects, not an alternative. They encourage active collaborations among scientists and disciplines on major health problems. The Board in its Report stated that SCORs "would capitalize on existing geographic aggregates of basic and clinical investigators capable of using advanced technology to pursue research on specific diseases."

The Board also carefully reviewed in detail progress in the Multipurpose Arthritis Centers (MACs) over the past five years, and concluded that "the success of the MAC program cannot be disputed." Funding for SCORs "should be in addition to an increase in MAC funding, not a substitute for it," and "the Board strongly recommends that NIH continue its commitment to support MACs."

The Board also strongly supports the vital programs of research training and research career development. A new cadre of research scientists capable of addressing and solving research problems using modern technology must be nurtured and developed. The Research Career Development Award, the Clinical Investigator Award, and the Physician Scientist Award are all essential to support the growth and development of basic and clinical investigators for the future.

The program of collaborative clinical trials (Cooperative Systematic Studies of Rheumatic Disease), with nine participating rheumatology centers across the country, plans and performs collaborative clinical trials to identify and test new treatments for various types of arthritis. This program has been extremely productive. One of its recently reported multi-centered clinical trials established that low-dose pulsed methotrexate was highly effective in many patients with severe rheumatoid arthritis refractory to treatment with gold salts or d-penicillamine. The Board strongly supports continuation and further development of this program of clinical trials.

The intramural research programs at the National Institutes of Health (NIH) are a national treasure, and must be supported appropriately and adequately.

Looking to the future, it is vital that advantage be taken of opportunities provided by the current exciting research advances in arthritis and related musculoskeletal diseases. This momentum must not be allowed to dissipate itself. Research scientists addressing these distressing and disabling diseases must be maintained and encouraged in pursuing their important activities.

STATEMENT OF E. DOUGLAS REDDAN, TRUSTEE, ARTHRITIS INSTITUTE OF THE NATIONAL HOSPITAL FOR ORTHOPEDICS AND REHABILITATION, ARLINGTON, VA

Senator WEICKER. Next we have Douglas Reddan, trustee of the Arthritis Institute of the National Hospital of Arlington, VA.

Mr. REDDAN. Mr. Chairman, I am E. Douglas Reddan of Santa Barbara, trustee of the Arthritis Institute of the National Hospital for Orthopedics and Rehabilitation in Arlington, VA.

Because two members of my family are arthritics and unhappy with all available, approved treatment throughout the country, I have commuted monthly from Santa Barbara to Washington over the past 6 years studying the arthritis problem. I would like to let you know what I have found. I appreciate the opportunity to appear before you today.

The amount of $500 million of Federal funds over the past four decades have failed to produce any safe, approved therapy, offering even remotely comparable results to those achieved by Dr. Thomas McPherson Brown of Arlington, VA. The approved drug of first choice, gold, has a 5-year success rate of only 10 percent, and has been reported in the literature as having the highest mortality rate of all prescribed drugs. This compares with Dr. Brown's 80 percent success rate over the same 5-year period and no toxicity problems.

Dr. Brown's therapy is not approved. The obvious question is: Why no approval?

Fifteen years ago, promising clinical research in Dr. Brown's antibiotic approach to disease was cut off from further NIH funding when a highly questionable short-term treatment program on only 13 patients, conducted at Boston University, was interpreted by the rheumatology profession as disproving the efficacy of the antibiotic approach.

Despite the cutoff of this Federal backing, Dr. Brown continued his research with patient support, and today is treating arthritics all over the country, in all age groups, all walks of life, including Congress, the White House, the Cabinet, the Supreme Court, and the embassies. With very few exceptions, all are referrals from other physicians.

By now Dr. Brown has in all probability treated more arthritics than any physician in the history of rheumatology, over 10,000. His practice is so crowded that it takes up to 1 year for new patients to get an appointment.

Dr. Brown is not alone. Other physicians, under his guidance, in various parts of the country, are having similar success with the antibiotic therapy.

After spending several thousand hours with Dr. Brown and his colleagues at the Arthritis Institute and with his patients, I have learned a great deal about the plight of arthritics, and the hopeless, pain-racked future facing most of them. I have come to know that he is closer to the truth about arthritis than anyone in the field.

The purpose of my testimony today is to suggest to this committee that a Government-sponsored clinical trial of Dr. Brown's antibiotic therapy is a reasonable course of action for this committee in light of the markedly unimpressive record of the existing approved therapies, and Dr. Brown's record of success now clearly recorded in both retrospective and prospective clinical trials, and that such a clinical trial is underwritten by NIH.

The present annual cost of arthritis to the U.S. economy is approximately $20 billion, and that is due to grow, according to the Arthritis Foundation, to $100 billion by the year 2000 if such action is not taken now.

It is my hope that this committee will lend its full support for a grant application for a trial of Dr. Brown's antibiotic therapy now. His grant application is currently under review by NIH. As Ms. Matia just said, its cost is only 6 cents per patient, and the reward could be tremendous.

Thank you.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony, Mr. Reddan. We are interested in this, and we will certainly consider it. Your statement will be inserted in the record.

Mr. REDDAN. Thank you.

[The statement follows:]

Statement of E. Douglas Reddan

I appreciate the opportunity to appear before you today to discuss a matter of critical importance to millions of arthritics and to recommend a course of action which many thoughtful and reasonable people believe to be long overdue.

As you are aware, arthritis is a disease which afflicts 35,000,000 Americans, causes an estimated annual loss of $20 billion to the economy and is due to grow to a $100 billion burden by the year 2000. It bears the ignominious title of "the nation's number one crippler."

Its cost in human suffering is beyond measurement. To millions of arthritics it's the most important happening in their lives, every day of their lives.

A half billion dollars of federal funds over the past four decades have produced no single approved therapy offering anything other than short-term relief for a life-long, chronic, dreadfully painful, disease. As an example, the drug of first choice, gold, has a five year success rate of 10% and also has been reported in the literature as having the highest mortality rate of all prescribed drugs.

Fifteen years ago promising clinical research in an antibiotic approach to the disease by Dr. Thomas McPherson Brown of Arlington, Virginia was cut off from further NIH funding when a highly questionable short-term clinical trial on 13 patients at Boston University was interpreted as disproving the efficacy of the antibiotic approach.

Despite the cut-off of federal backing, Dr. Brown continued with his antibiotic therapy research and today is treating patients from all over the country, from all age groups, and all walks of life - including Congress, the White House, the Cabinet, the Supreme Court and the Embassies. With very few exceptions all are referrals from other physicians. Lacking NIH funding his research has been supported entirely by grateful patients.

By now Dr. Brown has in all probability treated more arthritics than any other physician - over 10,000 - in the history of rheumatology. His practice is so crowded it takes up to a year for new patients to get an appointment. And he is not alone; other physicians, under his guidance, in various parts of the country, are having similar success with his antibiotic therapy.

Over the past five or six years, commuting monthly from Santa Barbara to Washington, and spending several thousand hours with Dr. Brown, his colleagues at the Arthritis Institute and his patients, I've learned a great deal about the plight of arthritics and the hopeless, pain-racked future facing most of them. I'VE COME TO BELIEVE HE'S CLOSER TO THE TRUTH ABOUT ARTHRITIS THAN ANYONE IN THE FIELD.

THE PURPOSE OF MY TESTIMONY TODAY IS TO SUGGEST TO THIS COMMITTEE THAT A GOVERNMENT SPONSORED CLINICAL TRIAL OF DR. BROWN'S ANTIBIOTIC THERAPY IS A REASONABLE COURSE OF ACTION FOR THIS COMMITTEE TO RECOMMEND AT THIS TIME IN LIGHT OF THE MARKEDLY UNIMPRESSIVE RECORD OF EXISTING APPROVED THERAPIES AND DR. BROWN'S RECORD OF SUCCESS NOW CLEARLY RECORDED IN BOTH RETROSPECTIVE AND PROSPECTIVE CLINICAL TRIALS.

It is my hope, and that of thousands of arthritics, that this Committee will lend its full support to an immediate clinical trial of Dr. Brown's antibiotic approach. A grant application for such a trial is currently in the hands of NIH.

Thank you.

STATEMENT OF GLORIA LORING, SPOKESPERSON, JUVENILE DIABETES FOUNDATION

Senator WEICKER. The next witness is Gloria Loring, spokesperson for the Juvenile Diabetes Foundation.

Ms. LORING. Good morning. My name is Gloria Loring. I am an actress and the mother of two boys, one is 8 and one is 10. My 10-year-old has had diabetes for almost 6 years.

When he was first diagnosed, I went through the normal feelings that a parent goes through, the mourning and loss, and I decided that I would do something. I am a busy woman, and I don't have a lot of time to waste, so I decided that my time should be spent efficiently. I aligned myself with the Juvenile Diabetes Foundation, which is patterned after the National Institutes of Health. I am here on behalf of both JDF, and in the larger sense, on behalf of an ad hoc group representing over 150 medical organizations. It is unprecedented for everybody to agree on something, but there is something that they agree on here, and that is that we must continue the support of the NIH.

When I was in Washington last August on some business, I had the opportunity to spend 6 hours at NIH, and met with a number of the researchers in different areas, one of them being Dr. Jesse Roth who heads the clinical area.

I asked him, if there was something that I was going to bring to Congress as an interloper, as a nonexpert, what would you want me to say to them. He said, "The most important thing we can communicate to the Congress and to the President, and to the White House, is that we are quite literally on the verge of a golden age of biomedical research." Those were Dr. Jesse Roth's words.

I feel that. I don't know and I am not conversant with all of the other areas of medical research, but I am extremely knowledgeable in the area of diabetes research. I know the breakthroughs that have happened just in the last 5 years. We now have home blood glucose monitoring. People can test their blood at home, and that was unheard of. It has caused a revolution in the quality of diabetes care. I know it has for my son.

He went into convulsions a couple of years ago before he had blood glucose monitoring at home. Now that does not happen any more. The quality of his personal care has been enhanced.

We now know that there are viruses that genetically predispose persons to diabetes that will cause diabetes. We are not exactly sure how it triggers it, but we suspect that it triggers the auto-immune system to turn against its own issue, to destroy the beta cells in the pancreas. We didn't know that 5 years ago.

We now have the possibility in the area of testing Cyclosporin, one specific drug that is an immune suppressant, with newly diagnosed diabetics, and there are a number of those studies going on in that area.

I think what offers us the most hope and what we are most excited about is that 10 years ago, when the long-range plan was read before one specific committee on diabetes, the word cure was not even used.

The word cure is not capriciously used now. We use it very seriously and mean it seriously.

When I speak with Dr. Paul Lacey at Washington University in St. Louis, who is one of the leading diabetologists in the world, a man with a nice little crewcut and a bow tie, and he is grinning from ear to ear about the potential for research to find a cure in the next 5 years, I start to get excited.

Those of us in diabetes research who go out and raise privately the millions of dollars to fund or to assist the funding for the research that the NIH made possible—they couldn't exist if it wasn't for NIH, and we subsequently assist them in their research. When I see these researchers get excited, it means that I can go out with a renewed commitment.

JDF has raised in the last 15 years almost $30 million, more than any other organization in the world, other than the Federal Government. We have give more than anyone else other than the Federal Government to diabetes research. So we are your partners in this. Actually, this next year there will be an unprecedented move in that JDF is going to give money to the NIH to procure a kind of consultant to oversee the clinical trials of beta cell transplants, and that is a first, the private sector coming into partnership with the Federal Government to support a Government agency.

So we are doing what we need to do. I realize, in a sense, I am talking to my own side here. I know, from the public record, that you are in favor of all this, and you speak out. I know your own sense of outrage about cutting back the number of grants from 6,500 to 5,000. I wish I could be speaking right now to the President and OMB, but I can't. In a sense, I am hoping that my message will get there to them through you. I know your own methods get to them.

Senator WEICKER. Talk to Senator Proxmire.

[General laughter.]

Senator WEICKER. He is the old pinchpenny.

Ms. LORING. I am going to switch my attention over here.

Let me say that I respect the enormity of the decisions that the ladies and gentlemen of the Congress have to make. Everything is worthy. Everything seems worthy. The pull in every direction must be tremendous. I don't think that you can make a better investment in this country right now than in basic medical research.

I understand the need for defense, but I do not understand the need for a 22-percent increase when we are going to cut health research by 6 percent. What are we going to be left protecting?

PREPARED STATEMENT

Senator WEICKER. Thank you very much. We will insert your prepared statement in the record at this point and then Senator Proxmire has some questions.

[The statement follows:]

STATEMENT OF GLORIA LORING

Summary of Recommendations:

The Juvenile Diabetes Foundation recommends that, for FY 1986, the National Institute of Health be appropriated $5.704 billion (an 11% increase over FY 1985 levels). The National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (NIADDK) should be appropriated $637.9 million; the National Heart, Lung, and Blood Institute (NHLBI) - $907.6 million; the National Eye Institute (NEI) - $215.0 million; the National Institute of Child Health and Human Development (NICHD) - $344.6 million; the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) - $436.6 million; the National Institute of Allergy and Infection Diseases (NIAID) - $408.1 million; and the Division of Research Resources (DRR) - $334.4 million.

We also recommend that $7.5 million be appropriated for the Centers for Disease Control's State Diabetes Control Projects and that the Indian Health Services be appropriated $1.9 million to operate the Model Diabetes Care Program.

The Juvenile Diabetes Foundation (JDF) appreciates this opportunity to present its views regarding FY 1986 appropriations for the National Institutes of Health and other federal diabetes programs. JDF is an international voluntary health organization of over 160 chapters dedicated to furthering research in diabetes and improving the quality of life of the diabetic.

Over the past several years, Congress has been faced with difficult budgetary decisions. Yet, the dedicated and compassionate members this Committee have recognized that the public health is a penultimate federal priority and have appropriated the research funds which have provided the promise of a better future for diabetics and their families. Because of your efforts, we can now live each day with a little less fear of impending blindness, heart disease, neuropathy, or kidney failure. The leadership and fiscal support you have provided created the comprehensive diabetes research, training, prevention, education and control program we know today -- a program which has become a model of governmental effectiveness and efficiency. But today, despite the efforts of Congress, the Administration has proposed a budget which poses one of the gravest threats ever, to a federal biomedical research effort which is the envy of the world.

THE FEDERAL DIABETES PROGRAM

The potential impact of the Administration's budget is particularly ominous because we have come so far in diabetes research over the past decade and we have the momentum to develop a diabetes preventive, to mitigate many of the disease's devastating complications, and, perhaps, to attain a cure. Indeed, the mechanism for continuing the federal onslaught on diabetes is securely in place: Research is conducted in practically every NIH Institute. There are seven diabetes research and training centers and four diabetes endocrinology research centers in operation. The Diabetes Data Group and the Diabetes Information Clearinghouse are performing the functions that this Committee mandated. The National Diabetes Advisory Board, a body of government officials, health care professionals, and consumer-advocates, including a number of JDF members, provides a coordinated focus for the plethora of federal diabetes-related activities.

THE ADVANCES IN DIABETES RESEARCH

Each of these federal programs represents the rungs on a ladder -- a ladder of hope. When the parent of a diabetic steps back and looks at this ladder, she sees that the hope for her child's future is based on the federal commitment to strengthening the ladder and keeping it in good repair. Each of the rungs on the ladder has been paid for by the efforts of this Committee over the past decade. And what have these precious dollars bought? Has your investment produced dividends? Can we point to successes in the treatment of this Nation's diabetics? Do we have a reasonable basis for being optimistic about a cure and the prevention of diabetes? The answer is a resounding YES on all counts. In recent years, we have catalogued those research advances:

- Researchers have demonstrated that several common human viruses are capable of producing diabetes in laboratory animals, thereby possibly leading to the development of a preventive diabetes vaccine.
- Scientists have identified genetic markers for diabetes which may make it possible to identify high-risk candidates before they develop diabetes and its complications.
- Scientists have demonstrated that meticulous control of blood sugar of the mother and monitoring of the fetus can reduce most of the complications of a diabetic pregnancy to a rate comparable to those in non-diabetic pregnancies.
- Clinical studies have established that photocoagulation significantly reduces the risk of blindness for proliferative diabetic retinopathy.
- Researchers have produced human insulin through recombinant DNA -- insulin which has been approved for use by the Food and Drug Administration -- which will ultimately provide an unlimited supply of purer, and more compatible insulin.

This year we come to you with signs of even more dramatic breakthroughs. We literally stand now on the brink of a new era in diabetes research. At long last, researchers have begun to understand the cause of diabetes. It has become apparent that juvenile diabetes probably results when the immune system of a genetically predisposed individual is activated by the presence of some type of trigger mechanism, perhaps a virus. The immune system then destroys the insulin-producing cells found in the pancreas.

Scientists are responding to this new understanding by making use of the recently approved immunosuppressive agent, cyclosporin. Experiments are being conducted to determine the efficacy of preventing juvenile diabetes in newly diagnosed patients using this drug. In addition, for the first time, important new drugs are being tested for their positive effects on diabetic neuropathy and diabetic blindness.

Of great importance, investigations into the transplantation of pancreatic islet, or beta, cells embody the potential to dramatically improve the quality of life for the diabetic within the next few years. It has become apparent that if the successful transplantation of healthy islet cells into the diabetic were possible, diabetes might actually be reversed. Researchers have already successfully transplanted clusters of the insulin-producing cells from one animal species to another. Moreover, scientists have shown that beta cells from healthy rats transplanted into diabetic mice actually reverse the diabetes in the mice! Significant progress has recently been made in isolating islet cells, procuring donor tissue, purifying islets from the pancreas, and overcoming rejection problems. And now, we derive great hope and pride from the fact that attempts at human transplantation have already begun.

These are major examples of research buying progress; Congressional appropriations for NIH have provided the currency for these transactions. Yet we have always viewed research towards a cure as a shared responsibility of the federal and private sectors. Over the past 15 years, JFD has invested over $30 million for diabetes research. Moreover, in an historic collaborative effort with NIH, JDF has agreed to provide a portion of the funding for a scientific administrator to assist in the development, implementation, and oversight of a multicenter research program regarding human islet cell transplantation.

THE SCOPE OF DIABETES

Despite this good news, however, the specter of diabetes and its devastating complications remains a grim reminder of the nature of this battle. Diabetes is the third leading cause of death in the United States; the leading cause of new blindness; the cause of 50% of foot and leg amputations among adults; the cause of severe neurological disorders; the cause of a disproportionately high rate of infant mortality, congenital malformation, respiratory distress, prematurity, and other serious medical problems; a major risk factor for cardiovascular disease; and the cause of 20% to 25% of kidney failure. Indeed, the federal government spends over $400 million per year supporting diabetics on dialysis machines--two times NIH's allocation for research to eliminate this insidious disease once and for all.

THE ADMINISTRATION'S FY 1985 AND FY 1986 BUDGETS

Against this backdrop stands the Administration's proposed budget for FY 1986, reducing the current federal research commitment and retarding anticipated scientific gains in the future. The President's proposal slashes spending levels for the current fiscal year, FY 1985, as well as the next, FY 1986. In particular, this budget request proposes to take the funding increase for NIH provided by Congress in the FY 1985 appropriations bill, money which was to be spent in FY 1985, and to spend these funds in other fiscal years through awarding multi-year funding awards for some grants and research centers.

Unconscionably, this proposal ignores the intent of Congress as expressed in the FY 1985 appropriations bill. Under this bill, NIH was directed to fund over 6,500 new and competing research grants in FY 1985. By executive fiat, the Administration is now attempting to reduce support for NIH grants from 6500 to 5000. In the short run these cuts could mean that the very promising developments made in recent years towards the diagnosis, prevention, treatment, and possible cure of diabetes might be forsaken. The primary budgetary burden will fall on the backs of the young and innovative clinical research investigator, who will, through diminishing biomedical research support, be pressed into deserting a career in research for the more stable and lucrative private practice of medicine. Ultimately, the Administration's action would surely undermine this Nation's position as the unquestioned international leader in biomedical research.

On March 18, 1985, this Committee received an advisory opinion from the General Accounting Office (GAO) stating that "the executive branch plan to fund some 646 NIH research grants on a three-year basis with fiscal year 1985 funds is unlawful." The Administration has yet to respond to this advisory opinion and, in further delaying resolution of the issue, is disrupting the conduct of approved clinical investigations. We applaud the leadership of this Committee for aggressively opposing the Administration's unreasonable attempt to elicit some budgetary savings at the expense of our national research effort. Like the Committee, JDF stands firm in its position that the Administration must release all of the funds appropriated by Congress in the FY 1985 appropriations bill for expenditure in FY 1985 for 6500 new and competing research grants.

The Administration's proposal for FY 1986 NIH funding is equally offensive, representing a six percent decrease in funding, the first reduction ever proposed by any administration in history. This funding level would exacerbate a further erosion in the payline for new and competing research grants; provide for funding of only 29% of approved research grants; reduce the number of approved clinical trials; restrict new therapies for patient care from public availability; force the continued deterioration of the physical plants and animal labs at institutions across the nation; reduce the number of full-time equivalent NIH employees and freeze the number of research trainees despite a critical shortage of young clinical investigators. These devastating reductions in NIH funding are all the more untolerable becasuse the Administration has proposed an R & D increase of 22% for the Defense Department, 6.5% for the National Science Foundation and a government-wide R&D average increase of approximately 12%.

JDF FUNDING RECOMMENDATION FOR NIH

The dividend from the federal investment in biomedical research -- a healthier America -- warrants an NIH investment comparable to the government- wide funding levels for research and development. Accordingly, the Juvenile Diabetes Foundation recommends that Congress appropriate $5.704 billion for NIH in FY 1986, as allocated on our appended recommendations. This request represents an 11 percent increase in the NIH budget. Yet, for the most part, our proposed budget would simply maintain current services at the levels provided by Congress in the FY 1985 appropriations bill: 6500 new and competing research grants funded at a priority score of 180 with about 38% of approved applications receiving support. Our proposed budget, one adopted by over a hundred voluntary and professional health organizations, would also provide for modest growth in research centers, clinical trials, facility construction, and manpower training programs.

NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, DIGESTIVE AND KIDNEY DISEASES (NIADDK)

Within this increase, we recommend that Congress specifically allocate $638 million to the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (NIADDK), the cornerstone of the federal diabetes research effort. This Institute's programs would be disproportionately hampered by the Administration's budget. Under this proposal, for instance, the number of new research grants funded would be 169 fewer than were appropriated in FY 1985.

A $638 million budget for NIADDK would restore cutbacks in research grants, traineeships, career awards, and intramural programs. The budget would also permit the Institute to support 40% of all approved research grants and to fund research grants to a payline of 180. Funding to the $638 million level should enable the Institute to allocate approximately $5 million in FY 1986 to the implementation of a cooperative human islet transplantation study. This program, which may well facilitate a cure for diabetes, would involve centralized acquisition of certain specialized research resources and implementation of a cooperative, multicenter research program involving a number of independent investigators, each with individual interests and expertise in various aspects of the relevant science.

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE (NHLBI)

The work of the NHLBI, under the superb leadership of Dr. Claude Lenfant, is so important to us because we live with the fear that our children will be struck down by heart disease related to their diabetes in the prime of their lives -- just as it struck down your friend and ours, Congressman Bill Steiger. Diabetes is one of the four major risk factors of cardiovascular disease in the United States. The diabetic is twice as prone to coronary heart disease as a non- diabetic, twice as susceptible to stroke, and five times as likely to develop arterial diseases of the limbs. Thus, we believe that $907 million should be appropriated to the NHLBI so that it may expand its diabetes research program and maintain the vital centers programs whose existence would be threatened under the Administration's budget.

NATIONAL EYE INSTITUTE (NEI)

As discussed above, diabetes is the leading cause of new blindness in the United States; its costs in terms of health dollars, lost productivity, and human pain and suffering are momentous. The National Diabetes Advisory Board has identified several priority areas for ocular research which can begin to be implemented if Congress appropriates $215.0 million to the National Eye Institute.

DIVISION OF RESEARCH RESOURCES (DRR)

Through a multitude of programs, including its General Clinical Research Centers across the country, DRR provides critical support for a broad range of diabetes-related studies. These vital centers programs would be deleteriously affected by the Administration's proposals for FY 1985 and FY 1986. All DRR centers should be maintained at least at current programmatic levels. JDF recommends that $199.9 million be appropriated to DRR in FY 1986 and that the Administration expend all of the funding for centers from the FY 1985 appropriations bill in FY 1985.

CENTER FOR DISEASE CONTROL (CDC)

CDC has spearheaded a number of very significant accomplishments designed to implement the Long Range Plan to Combat Diabetes. CDC has already evaluated and improved local patient education resources; sponsored workshops for dieticians and other members of the diabetes health care team; designed systems to identify and assimilate data on high-risk diabetic population groups; and provided surveillance of diabetes registries.

While investigators representing a multitude of scientific disciplines continue to seek basic and fundamental information which will eventually cure our children, the cost-effective application of current diabetes treatment information is being demonstrated through diabetes control programs in 20 states. The CDC centers program has been severely hampered since its inception because of inadequate funds to fully support the intervention projects which have demonstrated their cost-effectiveness. Thus, we recommend that Congress appropriate $7.5 million for CDC's National Diabetes Control Program in FY 1986.

INDIAN HEALTH SERVICE

Diabetes is a critical health problem among American Indians, affecting almost 50% of adults in some tribes. Several years ago, Congress authorized a Model Diabetes Health Care Program to develop and evaluate effective and culturally acceptable methods to reduce the severity of the disease and to reduce the expense to the Indian Health Service of related medical services. In New Mexico, diabetes-related hospitalizations have decreased 30% among residents of American

Indian communities served by the Albuquerque project. We recommend that Congress provide $1.9 million in FY 1986 for the Indian Health Service to operate the Model Diabetes Care Program and to expand training and information dissemination activities to other service units.

CONCLUSION

Several of the members of this Committee have made history. You helped create the National Commission on Diabetes, whose Long Range Plan became the foundation of the federal diabetes effort. The research which you have funded has built upon this foundation. The National Diabetes Advisory Board has provided the Congress and the diabetes community with a revised blueprint for research, training, education and control.

But will the resources be made available so that our children can be cured? We have come a long way -- over a dozen research breakthroughs in just a few years. While estimates place the social and health care costs of diabetes as high as $15 billion, Congress can make the sound investment choice to increase funding for the federal diabetes research effort. We want nothing more than to put JDF out of business, and the federal diabetes research initiative as well. But the bottom line is: Have our children been cured?

Within the next decade, we pray that we at JDF will be able to write the book on how diabetes was cured and the book will be dedicated to you, the Members of this Committee, who had the vision and patience to ignore what might have been politically expedient and to do what you know in your hearts was right.

JUVENILE DIABETES FOUNDATION

FY 1986
APPROPRIATIONS RECOMMENDATIONS
in millions of $

NATIONAL INSTITUTES OF HEALTH	FY 1985 (est.)	(Diab. $)	Admin. 1986	JDF 1986
INSTITUTE				
National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases	543.6	(108.9)	519.8	637.9
National Heart, Lung, and Blood Institute	805.3	(18.9)	775.3	907.6
National Eye Institute	181.7	(25.0)	164.4	215.0
National Institute of Child Health and Human Development	313.3	(12.0)	293.0	344.6
National Institute of Neurological and Communicative Disorders and Stroke	396.9	(8.0)	373.9	436.6
National Institute of Allergy and Infectious Diseases	371.0	(6.3)	352.6	408.1
National Institute of Aging	144.5	(2.0)	134.8	159.0
National Institute of Dental Research	100.7	(2.2)	93.4	110.8
National Institute of General Medical Sciences	482.3	(1.0)	458.5	526.4
National Institute of Environmental Health Sciences	194.8	(0.4)	182.6	210.3
Division of Research Resources	304.0	(18.7)	263.0	334.4
Other	1,311.4	(0.7)	1,241.3	1,413.3
TOTAL NIH	5,149.5	(204.1)	4,852.6	5,704.0*
CENTERS FOR DISEASE CONTROL Diabetes Control Projects	7.5		2.5	7.5
INDIAN HEALTH SERVICE Model Diabetes Care Program	1.9		1.9	1.9

* Funding at these levels would result in a total diabetes research appropriation of approximately $230 million.

Senator PROXMIRE. Thank you very much.

I agree with you on cutting defense. I am certainly going to vote to do that. I have consistently.

We have had some extraordinarily strong appeals for diabetes research, and yours is one of them. Your statement was very, very moving. People coming to my office from Wisconsin have been very eloquent on this subject. You are most articulate and persuasive.

Senator Burdick, do you have a question?

Senator BURDICK. Yes; I do.

I am sorry that I was a little late and I didn't hear all of your testimony, but what I heard was good.

Ms. LORING. Thank you.

Senator BURDICK. I have one question. Yesterday, for the first time, I heard about the new beta transplant procedure. If we provide adequate funding this year, how long does your association think it will take before this technology might be available to the public?

Ms. LORING. It is a very difficult thing to say. First of all whenever you get into human trials, you first of all start with people who have nothing to lose by having a procedure done on them. As an example, Paul Lacey, right now, is transplanting beta cells into people who are in the process of having kidney transplants at the same time. So you have patients who are not in great shape. You are not sure. You are giving them the beta cells while they are receiving the immuno-suppressant drugs.

In animal trials, they have accomplished the reversal of diabetes, but they have done in animals that only had diabetes and not so far along in the complications so as to be generally unhealthy in other aspects of their being.

We are hoping, quite frankly, that within 5 to 7 years we can have a treatment/cure—I say, treatment/cure because, in a sense, the transplant of the beta cells is after the fact. A real cure comes as a preventative, a vaccine, not unlike polio.

We have come so far. I heard a researcher recently say that 95 percent of what we know about diabetes right now we have learned in the last 5 years, and it is tremendous. Now we can build in that knowledge. As I said, the researchers themselves are talking about a cure.

I was at the White House when I was here in August, and we had a number of meetings, got up to Cabinet level meetings in trying to see the President, to have an issue of a Presidential initiative to end diabetes within the next 4 years. To make it a national priority. We feel that it is possibly achievable. We feel that the progress that has been made is so extraordinary in the last several years, that this could be a reality, but it needs the kind of commitment that you made to putting a man on the Moon, or curing polio. It needs to become a priority. I think that it is within our grasp.

Diabetes is the third leading killer in this country. We have made enormous strides in the care. I am in a position of some celebrity, and what I do for JDF is very public. As an exampled, I hosted a telethon at the end of March to raise $2 million. The show that I am on, "Days of our Lives," which is a soap opera, reaches 9 million people a day. We have just had a diabetes story line in which my little daughter on the show got diabetes. We were able to give both sides of the coin on diabetes. On the one hand, to give the terrible news, and what is bad about it, but on the other hand, actually say on television that there is hope for a cure. I cannot tell you the letters that I got from 14-year-olds who had had it for 3 years who said:

> You know, I didn't think there was hope. I really couldn't stand the thought of having diabetes for the rest of my life. I was not that interested in taking good care of myself. But now that I know that maybe there is a cure, I am going to take good care of myself because it seems that there will be an end to it.

I had a letter from the wife of a 35-year-old man who just died of diabetes and its complications after only 25 years. I had another from the mother of a 34-year-old daughter, who had two children, who just died. She said, "What can I do? I know that it is too late for my daughter, but how can I help to find a cure so that what happened to my daughter won't happen again. Is there really hope?"

I am telling these people that there is hope, and there is not going to be hope if we do not have a consistent commitment to the NIH on all levels of medical research.

For myself, my own interest is diabetes research, but we are losing researchers, we are losing their commitment to this area. They don't make a lot of money. They can go into private practice and make a lot of money. What they go into research for is to have impact. If they do not know that they have the consistency of commitment from the Federal Government, that they are going to be in business 10 years from now, why go into research. If they think that the funds are going to be pulled out from under them, there is no reason to go into research. They might as well go into private practice and make $50,000 or $75,000 a year. It doesn't make any sense for them.

That is the message that I got from Dr. Jesse Roth also, that very bright minds are being lost to research because there is not the commitment. The Congress definitely showed a commitment when they raised the funds for NIH last year, and we need to somehow communicate this at all levels, and have a unanimous kind of feeling, a consensus feeling from the Congress, even more so, to try to convince the OMB and the President that this must be a national priority. We will do in the private sector what we can do.

Senator BURDICK. What are your numbers against the administration's budget numbers? Did you testify as to what you need?

Ms. LORING. JDF would like to see the 6,500 grants maintained, both for this year and for next year. The idea of taking that money and spreading it out over several years, we are going to lose researchers. For the diabetes area alone, it will mean a loss of 60 to 80 researchers, and these are scientifically meritorious grants that have been judged so by their peers that need to be funded. We are only funding 33 to 35 percent of the grants that are being approved. It is a very difficult situation. No matter what we do, there are those of us who would say that it is never enough. Everything we do is going to be wonderful, and we are going to be grateful, but the more we do, the better. It is an actual, specific investment in our future. We know, the statistics show that when you find better treatment, people don't spend as much time in the hospital. There isn't as much kidney dialysis. We spend $2 to $4 billion a year on kidney dialysis and kidney transplants, and all of that. If we cure diabetes, that is $4 billion a year you won't have to spend.

It is just a good investment in our future.

Senator BURDICK. Thank you.

Senator PROXMIRE. Thank you very much, Ms. Loring. I hope that "Days of Our Lives" goes on prime time.

Ms. LORING. Me too.

[General laughter and applause.]

Senator PROXMIRE. I might say, incidentally, that the Stars Wars Nuclear Defense Program probably is going to tie up 14,000 researchers over the next couple of years.

Ms. LORING. Where do I go next?

STATEMENT OF JAMES B. FIELD, M.D., CHAIRMAN, NATIONAL DIABETES ADVISORY BOARD

Senator PROXMIRE [presiding]. Our next witness is Dr. James Field. Dr. Field is the chairman of the National Diabetes Advisory Board.

Dr. Field, we are happy to have you, sir.

Dr. FIELD. Thank you very much, Dr. Proxmire.

Senator PROXMIRE. My father was Dr. Proxmire. Unfortunately, I didn't finish my dissertation for my Ph.D.

Dr. FIELD. I am Dr. James Field, and I am professor of medicine at Baylor College in Madison, and I am the chairman of the National Diabetes Advisory Board.

As you probably know, the board was established by Congress to review and to advise the Federal Government on the implementation of a long-range plan to combat diabetes. We have the responsibility of reporting annually to the Congress, and the Secretary of Health and Human Services on the progress of that plan.

I would like to give you, since it is hot off the press, the annual report of the National Diabetes Advisory Board, and to indicate, as Ms. Loring did, that diabetes is a very serious disease. It is the leading cause of blindness in the adult. Twenty-five percent of all patients in long-range chronic end-stage renal disease programs are diabetics, and one-half of the amputations in adults in this country are due to diabetes. The annual cost of the amputations in diabetics alone is $250 million.

Senator PROXMIRE. That is a shocking figure. One-half of the amputations in this country are due to diabetes.

Dr. FIELD. That is right, and one-half of those are preventable. The economic burden of those amputations is greater than the total amount of money which the Federal Government provides for diabetic research.

As Ms. Loring pointed out, an investment in research in diabetes now would pay tremendous dividends. It has been estimated that the annual cost for diabetes for this country is between $10 and $15 billion a year in terms of hospitalization, time lost from work, premature deaths, the cost of medication and medical care, that one can reduce this significantly by accelerating the progress in diabetes research.

Although we have made major advances in the past few years, which have been supported by the National Institutes of Health, we are in a much better position to treat the disease and to treat some of the complications of the disease, but the current treatment advances, as valuable as they are, do not cure the underlying disease, nor do they prevent the most serious complications.

Perhaps the most exciting advance this year has been islet cell transplantation into diabetic humans. Although it is too early to assess the success of this technique, which is based on many years of basic research involving a broad spectrum of scientific disciplines, it does represent tangible evidence of the previous research investment which the Federal Government has made, and it offers additional hope to persons with insulin-dependent diabetes maladies.

The programs of the CDC have clearly demonstrated the economic benefit of educational programs for diabetic patients and have shown that they are tremendously cost effective in reducing hospitalization, reducing the cost of diabetes, and yet the budget for the DCD's diabetes program has been reduced this year.

The National Diabetes Advisory Board is very much concerned about the administration's proposal to reduce the number of funded grants from 6,500, which Congress proposed, to try to rectify what has happened over the last few years, down to 5,000.

The award rate this past year was only 30 percent of the approved grants, and it would have been even less than that. What the National Institutes of Health did, they reduced below the budget level recommended by the study section the amount that was actually funded. By doing this, they were able to raise the funding rate to 30 percent. If the administration's shortsighted policy of reducing the grants to 5,000 stays in effect, the award rate will be between 18 and 20 percent, that means one out of every five scientific and meritorious approved grant will be funded.

As Ms. Loring pointed out, one of the real tragedies of that won't be seen this year or next year, but you will not have the researchers in the future continuing the research which will find the cure to diabetes and other diseases.

We are very appreciative of what this committee and Congress has done, and is trying to do, but we are very much concerned that this shortsighted policy will have long-term ramifications which will be very difficult to rectify.

PREPARED STATEMENT

Senator PROXMIRE. Thank you very, very much, Dr. Field. We appreciate your excellent testimony. We will insert your statement in the record.

[The statement follows:]

STATEMENT OF DR. JAMES B. FIELD

I am Dr. James B. Field, Professor of Medicine at Baylor College of Medicine, Houston, Texas and Chairman of the National Diabetes Advisory Board. The Board was established by Congress to review and evaluate the implementation of a long-range diabetes plan and to report annually to Congress and the Secretary of HHS on recommendations for future policies, programs, and budgetary requirements. A pre-publication copy of the Board's most recent annual report will be provided to the subcommittee today. The report describes the tremendous progress of the diabetes program during the last few years and the significant opportunities for future advances both in research and its application to treatment.

Diabetes is a serious disease. For example, it is the leading cause of adult blindness. Diabetes also accounts for about 25 percent of all cases of kidney failure and 50 percent of all non-traumatic amputations in this country. Women with diabetes have a 5-7 fold increased risk of heart attack and diabetic men also have an elevated risk of death or disability from cardiovascular complications of diabetes. Diabetes also has an adverse effect on pregnancy -- birth defects are four times more common in diabetic pregnancies. In addition, there is a greater incidence of prematurity, stillbirths, neonatal respiratory distress syndrome, and toxemia in pregnancies complicated by diabetes.

Diabetes is a costly disease. Each year, chronic and acute complications of diabetes cost at least $7.4 billion in direct medical care and contribute to 24 million days in the hospital. A major portion of this economic burden falls directly on the federal government and the taxpayer through the Medicare and Medicaid programs and the direct health care responsibilities of the Veterans Administration, the Indian Health Service, the Department of Defense, and other federal agencies. For example:

o The annual cost of care for diabetic patients under the Medicare-funded End-Stage Renal Disease Program is currently about $200 million per year and is growing rapidly.

- About 5,000 new cases of diabetes-related blindness occur each year. Federal and state disability payments, benefits, and rehabilitation services alone total approximately $60 million annually.
- About 20,000 amputations of toes, feet, and legs occur annually in persons with diabetes. The hospital costs alone of these amputations are about $250 million, more than the total federal expenditure for diabetes-related research and control programs. Again, a major share of these expenses are borne by the Medicare/Medicaid program, the Veterans Administration, and the Indian Health Service.

Major advances in biomedical research, supported by the National Institutes of Health, have greatly expanded our understanding of the pathogenesis of diabetes. Our ability to treat the disease and to prevent or reduce the severity of some of its complications has improved markedly. However, current treatment advances, valuable as they are, do not cure the underlying disease, nor do they prevent the most serious complications. Perhaps the most exciting advance this year has been islet cell transplantation in diabetic humans. It is too early to assess the success of the present technique, which is based on many years of basic research involving a broad spectrum of scientific disciplines. Nonetheless, it represents tangible evidence of the previous research investment and offers additional hope to persons with insulin-dependent diabetes. Preventing diabetes and reducing the severity of its complications would result in enormous savings in medical care, hospitalization costs, and rehabilitation services. In fact, several projects supported by the Centers for Disease Control have already documented significant reductions in diabetes-related hospitalizations following carefully planned diabetes patient education programs that incorporated current medical knowledge about this disease.

However, we cannot rest at this stage of the effort to control diabetes. Most of the recent advances in the prevention, treatment, and control of diabetes are a result of increased federal support for biomedical research during the mid and late 1970s. This impetus has not been maintained in the

1980s, since available funds for these programs have not kept pace with inflation. For example, the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases, (NIADDK), the lead institute for diabetes research, has historically funded approximately 45 percent of approved, scientifically meritorious research applications. The award rate declined to about 30 percent in 1984 and would have been lower if previously awarded budgets had not been administratively reduced. The priority scores of funded grants also reflect the decline in NIH's resources. Research grant applications are ranked from 100 to 500, with a score of 100 representing the highest possible rating. Although it is generally believed that a score of 225 or better represents excellent quality, most NIH Institutes have been unable to fund grants with scores above 190 in the past four years.

Congress partially corrected this decline by providing additional funds for NIH in fiscal year 1985. However, the administration's proposed budget for 1986 would reverse the effect of the congressional action by reserving a significant portion of the 1985 appropriation to "forward fund" the second and third year of new grants. Specifically, the administration's proposal would reduce the fiscal year 1985 program level for NIH by $254 million and would provide less than a 2 percent increase in 1986 over this reduced base. Under the administration's proposal, the priority score cutoff will be approximately 150 to 160 in most Institutes, the lowest level in the history of NIH. The congressional appropriation for 1985 would have supported 6,500 awards for competing research projects. The administration's proposal provides for only 5,000 in 1985 and 1986, a reduction of 23 percent. Such action would affect a large number of very high-quality research projects. The cutback also would discourage bright young trainees from pursuing research careers, thus compromising our ability to conduct research in future years.

The administration's proposal reflects a shortsighted policy, since the increasing economic burden of diabetes directly increases federal expenditures for health care. Therefore, the fiscal year 1985 budget must be restored to the level provided by the Congress and additional funds must be provided for 1986 to permit a modest increase in the number of high-priority projects.

The Board believes that the advances and opportunities summarized in its report justify a strengthened and expanded diabetes program to (1) seek more basic and fundamental information leading to the prevention and cure of the disease itself, and (2) develop and evaluate improved methods for treating the disabling complications. The Board's recommendations for FY 1986 represent the minimum resources necessary to continue the research programs of NIH at the current level of effort and provide full support to essential activities which have not kept pace with cost increases in recent years.

Recommendations

The National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) is the lead agency for diabetes-related research. The Board recommends a budget for NIADDK of $640 million in fiscal year 1986, an increase of $95 million over the original 1985 congressional appropriation. This budget will enable grants to be funded to a priority score of approximately 180, permit funding of the Diabetes Control and Complications Trial, maintain support for the diabetes centers, and restore manpower development awards to the 1985 level.

Comparable increases are recommended for the other NIH Institutes and Divisions that support diabetes-related research, including the National Heart, Lung, and Blood Institute (cardiovascular consequences of diabetes), National Eye Institute (ocular complications of diabetes), National Institute of Child Health and Human Development (effects of diabetes on pregnancy and infants), National Institute of Allergy and Infectious Diseases (infections and immunogenetic factors in diabetes), National Institute of Neurological and and Communicative Disorders and Stroke (neurological complications of diabetes), National Institute on Aging (interrelationships between diabetes and aging), the National Institute of Environmental Health Sciences (relationship between environmental agents and pancreatic structure and function), and the National Institute of General Medical Sciences (noncategorical research and the training of physician-scientists).

In addition, the Division of Research Resources (DRR) provides a critical resource that has direct application to diabetes research. The General

Clinical Research Center (GCRC) program, funded by DRR, supports noncategorical clinical research facilities at academic institutions. The vast majority of all clinical investigations related to diabetes are conducted in these facilities. The budget for this important program has not kept pace with inflation in recent years, leading to a decline in the number of centers and the number of beds. This program should receive increased support comparable to the increases proposed for NIADDK and the other NIH Institutes.

> The Board recommends that the administration and Congress restore the previously appropriated funds for fiscal year 1985 and provide $640 million in fiscal year 1986 for the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases. The Board also recommends that comparable appropriations be provided for diabetes-related programs of other NIH Institutes and Divisions.

STATEMENT OF KARL SUSSMAN, M.D., PRESIDENT, AMERICAN DIABETES ASSOCIATION

Senator PROXMIRE. Our next witness is Dr. Karl Sussman, president of the American Diabetes Association.

Dr. SUSSMAN. Senator Proxmire, my name is Karl Sussman, and I come to you in my capacity as president of the American Diabetes Association.

The American Diabetes Association is the largest voluntary health agency which is dedicated to conquering all forms of diabetes maladies. Our organization comprises over 200,000 lay and professional members, and hundreds of thousands of volunteers. The mission of my association is to search for a preventive or a cure for diabetes, as well as improving the state of well-being of the patient population with diabetes.

You have already heard from other speakers that diabetes is a major cause of death. There are considerable human and actual costs relative to this disease—$2 billion being spent each year to care for patients with end-stage renal disease. Indeed, the patient population with renal disease who is undergoing dialysis, diabetes is one of the most common diseases for which patients are undergoing this particular procedure—$250 million being spent on amputations for diabetic gangrene.

Basically, the bottom line of my presentation, Senator, is that only with continued research can we hope to find a cure or a preventive for diabetes, or simply be able to treat patients better. As has already been mentioned, we have made considerable progress during the past several years. We really have the momentum going, and I think if the funding is there, we really do stand the possibility of finding a cure, and ultimately resolving the many problems in diabetes.

Senator, I have been in the field of diabetes for close to 25 years, and this is the first time in my experience when we can realistically talk about achieving a cure. These are the most exciting of times, indeed.

I wanted to take the opportunity to go on record at this particular time to thank Senator Weicker for his support, particularly the strong advocacy that he has given relative to funding 6,500 NIH grants in the current year. I think that this is particular crucial and critical if we are to sustain the critical momentum which we need in order to come to conquer the problems associated with diabetes.

As has already been mentioned, we have had remarkable developments. The use of laser therapy, for example, to treat diabetic eye disease. I have here a picture of a patient with retinopathy, and the use of this specialized treatment, which has not only been effective in restoring vision, but has been a tremendous cost saving.

For example, we spent something like $10 million over a period of 10 years to study laser therapy, photocoagulation therapy. We are saving every year now, utilizing this procedure, $25 million in terms of treating these patients, in terms of avoiding disability, getting these patients back to leading useful and productive lives. I am really excited about the progress that we have made.

My bottom line is, we believe that a $5.7 billion budget is necessary for NIH, that this represents an 11-percent increase and at least 6,500 grants is a fair proposal. We are also recommending a budget of $637 million for NIADDK, which will include a special initiative for islet transplantation at approximately $5 million.

All of the developments and the progress that we have made in this field have been known to you.

Senator, I would just like to end on a story. When I leave this particular room where I have given testimony, I am going over to the Cannon Building to meet one of the staff director of one of the committees. I went over there 2 weeks ago, and I went into his office, and he said: "Dr. Sussman, I have been waiting for you to come all week." That is kind of unusual here on Capitol Hill to have somebody say that they have been waiting for you to come all week.

This man, I saw him on a Friday, the previous Monday his 11-year-old child was admitted to the hospital for treatment for diabetes. He and his wife were absolutely falling apart. Their fear, their anxiety, their fear concerning the future. I am going over now to meet with this individual who is on one of the House committees, to meet with him and his wife, to tell them about the hopes and the aspirations that we have in the field of diabetes.

I have a bottom line. In my talk to him, I am going to say, we can only realize these hopes and aspirations if the momentum continues, and if there is a high level of NIH funding maintained.

Thank you for your attention.

PREPARED STATEMENT

Senator PROXMIRE. Thank you very much, Dr. Sussman, for a very fine presentation. Your statement will be entered into the record at this point.

[The statement follows:]

STATEMENT OF DR. KARL SUSSMAN

I appreciate this opportunity to testify before this Subcommittee on behalf of the American Diabetes Association, which has 58 affiliated associations and 200,000 lay and professional members. I want to take this opportunity to express the gratitude of the American Diabetes Association for the Chariman's strong stand in support of the funding of 6,500 new grants in Fiscal Year 1985 and his general commitment and support for those with chronic illness and disabilities. We applaud your leadership.

Mr. Chairman, some very exciting developments are taking place in diabetes research desite, in our view, an inadequate level of research support to combat this serious disease. We agree fully with the recent statement of the Director of NIADDK that "research in diabetes has brought remarkable advances in the understanding and treating of one of this country's most severe public health problems," diabetes. We are now more able to pinpoint the role of genetic factors, the immune system, and environmental influences in the development of diabetes.

We also are making progress in the treatment of diabetes and possibly finding a cure for certain forms of diabetes. For example, laser therapy is now available to treat diabetic retinopathy. A major clinical trial is in the process of establishing the effects of tight blood sugar control, such as that obtained by the use of implanted and external pumps, on the development of the complications of diabetes such as blindness, peripheral nerve disease and kidney failure. But most exciting, we are able to take enormous strides in an area I refer to as a possible cure: the transplantation of islet cells, which is described in more detail later in my testimony.

1. General Position on NIH in FY 85 and FY 86

In general, the American Diabetes Association supports strongly a policy of stabilizing NIH research support at levels which will permit at least 40%, and eventually 45 to 50%, of approved research grants to be funded by NIH and its individual institutes. Such a policy should also result in grants being funded to scores of at least 180-190. We also believe it critically important, as well, that the NIH have a sufficient budget to support (1) at least 10,000 trainees although eventually 10,500 trainees should be funded by the National Academy of Science, (3) at least inflation growth and some program growth for centers programs and, (3) the funding of most all approved clinical trials. This approach represents a blanced and reasonable research budget for NIH.

In Fiscal Year 1985 and Fiscal Year 1986, we believe that an appropriate NIH budget involves support for 6,500 new grants as well as balanced growth in other programs. For FY 1986, we specifically endorse the Ad Hoc Group for Medical Research Funding's budget recommendation of $5.7 billion or about 1% over a current services budget. We are on the steering committee of that organization and feel our budget proposal is a fair and reasonable one. This FY 86 budget will enable almost 40% of all approved grants to be funded and will result in about 6,500 new grants being funded. It would not fully fund all approved clinical trials nor fund 10,500 trainees, but we realize that not everything needed can be funded in these days of deficit problems.

2. Fiscal Year 1985 Budget and S.J. Res. 89

The American Diabetes Association strongly supports S.J. Res. 89 introduced by you and Senator Kennedy which would essentially require the NIH to fund 6,500 new research grants in the current year. S.J. Res. 89 codifies the legislative intent of the fiscal year 1985 appropriation law for the Departments of Health, Labor, Health and Human Services and Education, Public Law 98-619. We also believe that the Comptroller General's opinion issued in response to your request is a correct statement of the law and we hope the Administration will comply with this opinion. Clearly, some 1,500 scientists who would otherwise have their research supported by NIH will not have that research supported if the NIH continues to fund only 5,000 new research grants this year. In NIADDK, only 613 new research grants would be funded instead of 800. The average number of new research grants funded by NIADDK over the past 5 years has been about 720.

At the National Institute Arthritis, Diabetes, Digestive and Kidney Diseases alone, six major clinical trials dealing with important new methods of medical treatment will not be funded if the 5,000 new grant policy is adhered to. One of these trials involves the use of the drug cyclosporin as an intervention in the immune system to prevent the onset of juvenile diabetes. The potential of cyclosporin in diabetes treatment is very exciting and the loss of this trial would be harmful.

3. Budget and Appropriations Specific Recommendation for NIH for FY 1986:

We recommend an increase of about $550 million for NIH, an increase of 10.7% over the FY 1985 actual appropriations. The Administration's overall research and development (R&D) budget for all federal agencies increases by 13% in 1986 over 1985. The NIH budget proposed by the Administration decreases by 6% however. The Defense Department R&D budget increases by 22%. The Administration has been a supporter of the federal role in science generally, but in it's support for the life sciences of NIH has lagged far behind its support for other sciences.

Research grants with scores of up to 180 to 185 could be funded under our proposal and nearly 40% of all approved grants would be funded. This budget proposal for FY 1986 will permit all continuation grants, including individual scientist grants, centers and clinical trials to be funded during FY 1986. Funds would be available to rehabilitate and improve the physical plant of laboratories, including animal laboratories, which have reached a state of significant deterioration. Some major initiatives could also be started in areas related to islet cell transplantation biology and immunology, centers programs and new clinical trials.

4. NIADDK Budget

We recommend a budget for NIADDK of $637 million in FY 1986, an increase of $97 million over FY 1985.

In FY 1985 under the original appropriation bill, this Institute should support about 800 new grants. In FY 1983 and FY 1984, it funded about 770. Even with these levels of new grants, only one in three approved grants have been funded over the past four years, and that is a rate too low to be consistent with support of all excellent science.

The FY 1986 budget of the Administration is $520 million which is $24 million less than in the current year's budget of $540 million. That budget would support only 600 new grants, and fewer research centers than in FY 86.

Our proposal for NIADDK will enable existing work regarding diabetes and endocrinology to be maintained and expanded. In particular, it will allow funding for the Diabetes Control and Complications Trial in FY 1986 with some supplementation to enhance the efficiency of the trial; this trial is one of the most important trials supported by NIH. This proposal would enable a major expansion of individual research grants in diabetes, endocrinology, and metabolism. The proposal will enable about 900 new grants to be funded in 1986 so that about 40% of approved grants will be funded and grants will be funded to scores of 180. This is in line with our general NIH recommendation as to award rate and payline stability.

We specifically request that within this increase for NIADDK a special initiative be funded to increase basic and clinical research relating to transplantation biology and immunology of pancreatic islet cells and other endocrine tissue. This initiative, which includes basic science regarding immunology and endocrinology, has great possibilities based on recent work being done in a number of research centers on islet cell transplantation. We estimate that a $5 million addition to the NIADDK budget is necessary for this islet transplantation and related science initiative.

Research regarding the transplantation of insulin producing islet cells has been developing for more than a decade. In the early to mid-1970s, researchers at Washington University in St. Louis showed that transplanted islet cells can survive, take root and work to control blood sugar in laboratory rats. Much basic research has been undertaken in the past ten years dealing with the process of obtaining appropriate cells for transplantation and regarding the immune system's response to such transplantation. In recent years, scientists have been experimenting effectively with islet cell transplantation in dogs. Now there are at least 8 major research centers doing some form of research in this exciting area and the research community working in this field believes that we are on the verge of a major research breakthrough. However, there needs to be expanded research activity in this area. Such research activity would inlcude basic research with regard to questions involved in transplantation biology and immunology. The research community also believes that it is ready for major experimentation with humans through clinical trials.

5. NEI and NHLBI

Mr. Chairman, we also are extremely interested in the research activities of the National Eye Institute and recommend a budget of at least $210 million for it. This level would provide for the support of current levels of research activity and allow about a 3% growth rate. The NEI continues remarkably important basic and clinical research related to diabetic retinopathy. The Heart Institute, likewise, plays a significant role in research related to diabetes. We are very supportive of its centers programs for example. We recommend a $910 million budget for NHLBI.

6. Why It Is Important to Maintan This Momentum in Biomedical Research

Clearly, major scientific developments have occured in the past few years in the field of diabetes as well as many other areas of biomedical research. These developments have had significant technological implications and American industry has benefited substantially from this basic research.

I would like to provide you with one very concrete example, of a major biomedical research development which has provided astonishing human and economic benefits. The economic benefits relate specifically to savings in the disability and health care portions of the Department of Health and Human Services budget. This is only one example of many which NIH can produce.

During the past ten years at a total cost of $10 million, the National Eye Institute supported research which resulted in a laser therapy treatment for dibetic retinopathy. Diabetic retinopathy is the major cause of blindness other than accidents in the United States. An estimated 4,700 Americans become blind from the disease each year. The laser therapy treatment, which developed through research sponsored by the National Eye Institute, is now being practiced and most all insurors, including the Medicare program, pay for the therapy. This therapy has been shown to substantially reduce, and in many cases, eliminate blindness among certain individuals with diabetic retinopathy. The National Eye Institute has conservatively estimated that $25 million per year is saved in Supplemental Security Income disability payments, the federal share of Medicaid payments and rehabilitation services through the application of this therapy to the population at risk. Savings from Medicare payments and Social Security Disability Insurance payments are not estimated in this figure and they would increase the direct savings substantially. In five years, this advance alone will probably save the federal budget an amount equal to the entire NEI budget.

Finally, Mr. Chairman, we wish to urge your Subcommittee to retain current funding levels for the CDC Diabetes Control Program which the President's budget reduces from $7.5 million in FY 85 to $2.5 million in FY 86. The

President's budget eliminates all support for the current state diabetes control programs. The Diabetes Control Program is basically a program of grants to and collaboration with state health departments in states where diabetes is particularly prevalent and where the Health Department establishes preventive programs to reduce the complications associated with diabetes. These programs include professional education, training and education of patients in methods of self-care and management, and outreach programs. Already many of these state programs have demonstrated reductions in hospital stays for persons with diabetes and reductions in complications such as blindness. This program has demonstrated that Medicare and Medicaid funds are saved by carrying out preventive programs. For example, the CDC program has been instrumental in spreading the use of the laser therapy treatment for diabetic retinopathy once research established its viability. Diabetes is one of four diseases producing the greatest number of hospital stays for Medicare beneficiaries and this CDC diabetes program can produce major savings. We urge the Subcommittee to fund this program at the '85 level and to stress that this program is an ongoing preventive service program, intended to assist states in implementation care programs targetted on selected complications such as blindness and diabetic pregnancies.

STATEMENT OF JAMES L. BOYER, M.D., CHIEF, DIVISION OF DIGESTIVE DISEASES, YALE UNIVERSITY SCHOOL OF MEDICINE

Senator PROXMIRE. Our next witness is Dr. Boyer, chief of the division of digestive diseases at Yale University School of Medicine.

Dr. BOYER. Senator Proxmire, it is a pleasure to appear before you.

I am James Boyer, and I am a professor of medicine at Yale University. I am the director of a new National Digestive Disease Research Center, and I am also a former member of the National Digestive Disease Advisory Board.

Today, I am appearing on behalf of the Coalition of Digestive Disease Organizations. This coalition is a group of lay voluntary health organizations, as well as professional organizations, devoted to the study, prevention, research, and treatment of digestive diseases.

I would like to address my remarks on behalf of the coalition to two areas. The first is to just briefly update you on some of the progress that the new digestive disease centers are making, and second, to discuss with you and bring to your attention briefly some of the problems that the current budgetary situation is creating for the future of these programs.

PREPARED STATEMENT

I would like to ask you, if I can, to accept my more detailed written testimony for the record.

Senator PROXMIRE. It will be included in the record in its entirety.

Dr. BOYER. Thank you.

[The statement follows:]

STATEMENT OF DR. JAMES L. BOYER

Funding Recommendations for Fiscal Year 1986
Coalition of Digestive Disease Organizations

A. National Institute of Arthritis, Diabetes, Digestive and Kidney Disease: $638 million. This level of funding would provide a modest growth rate for the institute and provide for the stabilization of the centers programs at the institute.

B. Digestive Disease Division: $150 million of the institutes funding for the Digestive Disease Division of NIADDK. This level would represent a degree of parity among the institute priorities.

C. Conte Digestive Disease Centers Program: $10 million. This level of funding would allow the NIADDK to fund the meritorious centers research grant applications received in recent months.

D. DD Advisory Board: $350,000. The outstanding efforts of the DD Advisory Board should be funded at a rate very similar to other advisory boards.

E. Epidemiology and Data System: $2 million. To support the substantial effort being conducted to establish liver transplant data, endoscopy data, and basic digestive data and information.

F. National Digestive Disease Education and Information Clearinghouse: $500,000. To support the current outstanding efforts to provide education and information to thousands of patients, family members and professionals concerned with diseases of the digestive system.

Mr. Chairman, and members of the Subcommittee, I am pleased to appear before you today on behalf of the Coalition of Digestive Disease Organizations. I am a professor of Medicine at Yale University and Director of the Digestive Disease Research Center at Yale. I am also a former member of the National Digestive Disease Advisory Board. The Coalition of Digestive Disease Organizations is an association of lay national voluntary health organizations and professional societies concerned with the prevention, treatment and control of digestive diseases through the improvement and expansion of research, training and education programs.

I wish to focus my testimony today to the areas of research being conducted by the newly established Conte Digestive Disease Research Centers Program and outline how the current budget crisis at NIH is affecting research efforts.

Six new research centers in Digestive Diseases were established by the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases in September, 1984 at the recommendation of Congress, with much of the effort to establish these important centers being put forth by your subcommittee and by Congressman Silvio Conte. The Centers are located around the country and are conducting various critical digestive disease research efforts.

A number of important new developments have been made possible by the support of the digestive disease research center devoted to the study of liver structure, function and disease at Yale School of Medicine.

Investigators have developed a new model for the study of bile secretion which allows direct access to the primary secretion from the liver cell for the first time. This research should lead to a better undertanding of the mechanism by which jaundice and bile secretroy failure develop.

Studies of the mechanisms of liver fibrosis are being carried out identifying new types of collagen fibers and studying how this scar tissue can be prevented or reversed, in liver injury.

The human liver transplant program is gathering important data to enable the problem of organ rejection to be more easily recognized and treated. This program involves the frequent analysis of liver biopsy material collected by the Liver Centers Program.

Finally, a human liver DNA library is being screened to enable cloning of a transplantation antigen that is secreted by the liver and that may have important properties in suppressing the patients organ rejection response.

Investigators at the center located at the Mayo Foundation are examining the role of neuropeptides in the development of a variety of digestive diseases. One particular area of interest to this group of scientists is the effect of neuropeptides on gastrointestinal motility and related functions. For example, one of the investigators is studying the organization of neurons in the prevertebral ganglia 1) to determine if "pacemaker" neurons are present in prevertebral ganglia; 2) to compare the pattern and organization of peripheral and central synaptic input to neurons in the inferior mesenteric ganglion; 3) to determine if mechoanoreceptors in the wall of the colon make synaptic contact with neurons in the inferior mesenteric ganglion; 4) to study the effect of neurotransmitters (i.e., NE), gut peptides, and a potassium channel blocker on these neural systems.

At the University of Iowa, the subject of research is the study of the movement of the digestive tract, the smooth muscle which accomplishes this movement, and the neural and humoral controls of gastrointestinal motility. Current studies on the lower esophageal sphinctcer may help us to understand the cause of regurgitation of acid from the stomach into the esophagus which can cause heartburn. These studies involve the use of animal models. The animal model which is commonly used is the opossum. This model is chosen because the opossum hangs upside down and therefore must have a powerful esophageal spincter to prevent the stomach contents from flowing down into th esophagus.

Studies of colon motility have provided increasing evidence that at least some cases of severe chronic constipation are a consequence of damage of dysfunction of the extrinsic or intrinsic nerves to the colon. Current anatomical studies are directed towards a better understanding of the innervation of the colon. When these studies are completed, new studies will be designed to define the physiological effect of the extrinsic innervation on colonic motor function.

The focus of the Digestive Diseases Research Core Center at the University of Michigan in the study of Gastrointestinal Hormones has been the isolation of cDNA clone encoding pancreatic polypeptide, and important regulator of pancreatic secretion, from an endocrine neoplasm which may lead to better understanding of pancreatic function in health and disease.

Another project discovered that dynorphin, and endogenous Opiate, is rapidly converted by brain tissues into a non-opiate breakdown product by itself took on new biological actions different from, but as potent as, its opiate actions prior to degradation. These data may have profound implications regarding the actions of endogenous opiates in man.

The Center for Gastroenterology Research in Boston, Massachusetts focuses on Absorptive and Secretory Processes at the Tufts University School of Medicine and New England Medical Center Hospital.

Studies at this center include development of a model for giardia in cell culture. The reason giardia live in the upper intestine appears to involve pancreatic proteases activating a lectin in the giardia which is involved in giardia attachment to intestinal cells. It has been demonstrated that amobae make and regulate release neurohumoral substances involved cause intestinal secretion and may be involved in the diarrhea of amoebiasis. The receptor for Shigella enterotoxin in small intestine epithelial cells has been identified and shown to be absent until weaning in a rabbit model. The Toxin from toxic shock syndrome has been identified and appears to be acting by interleukin in causing the disease. A new Ca++ pump has been found in the lysosomes of human neutrophils. Than Ca++ ATPase has been identified as being involved in tetanus toxic action.

Investigators at the Harvard Digestive Diseases Center have described a process of reconstitution of epithelial continuity following injury to the luminal surface of the stomach. They have characterized this process anatomically, and have defined the factors which affect it. Reconstitution is a characteristic of a variety of epithelia, including the gallbladder, the duodenum and the colon. This is a method by which the gastrointestinal tract rapidly heals the injuries which transpire in daily life. Reconstitution occurs without turnover of epithelial cells. It depends upon the presence of calcium and actin. Impairment of the process will result in ulcerations in the epithelia which are injured.

At the National Institution of Arthritis, Diabetes, Digestive and Kidney Diseases, there are currently eight or more meritorious pending Conte Digestive Disease Research Centers applications. These research center applications are in the areas of diarrheal disease, liver disorders, gallbladder disease, and inflamatory bowell disease. Because of the Centers funding constraints imposed by the Office of Management and the Budget, it appears only one (as mentioned before, there are currently 6) Digestive Disease Center Grant could be funded in FY'85. Further devastation would occur in FY'86.

Mr. Chairman, it is clear the backdoor impoundment - forward funding scheme being imposed by OMB is a sneaky way of reducing funding for crucial research efforts. I hope the example I just cited is evidence that this directive needs to be overturned by Congress. The Digestive Disease community, the millions of Americans who suffer gastrointestinal disease count on your support for this effort.

(For the record)

At this time, the Coalition of Digestive Disease Organizations would like to also express support for the National Digestive Disease Advisory Board, the Digestive Disease Epidemiology Data and Systems, and the National Digestive Disease Education and Information Clearinghouse. The DD Advisory Board meets regularly to explore opportunities for implementation of prevention, treatment, and education applicable to the immediate and long term needs of the American population afflicted with diseases of the digestive system. Some of the nations greatest medical and scientific authorities are members of the Board. The Digestive Disease Epidemiology and Data Systems are focusing on risk, prognostic, and diagnostic factors relevant to the spectrum of digestive diseases. As one aspect of this system, NIADDK plans to establish a research data base on patients who have been evaluated for or have received a liver transplant. This data base will be valuable as a means for improving both patient selection and the results of liver transplant operations. The planned timing of establishment of the data base is favorable, because liver transplantation, essentially done until recently by only one American surgeon, is now beginning to expand to other institutions. A Data Base for endoscopy, and a collaborating effort with the National Center for Health Statistics to develop a basic data base on all digestive diseases is also being developed.

The Digestive Disease Education and Information Clearinghouse, now entering its fifth year has responded to 25,000 inquires, distributed nearly a million publications, developed and updated over 60 publications, and performed many other important tasks in educating digestive disease patients and professionals throughout the country. The DD Education and Information Clearinghouse is working to improve the prevention and control of selected digestive disorders through programs designated to reach populations affected, or at risk. The Coalition is associated with the Digestive Disease Clearinghouse within the National Digestive Disease Education Program, a nationally coordinated effort to increase understanding of digestive and health diseases.

Mr. Chairman, I appreciate the opportunity to present testimony to your subcommittee on behalf of the Coalition of Digestive Diseases Organizations. I am pleased to respond to any questions you may have.

Dr. BOYER. In September of this past year, six new research centers were established by Congress, because of the work of this committee, and also Congressman Conte and the Appropriations Committee in the House. These centers are now located in several parts of the country, and I would like to highlight a couple of points of progress for you.

At the Yale Digestive Disease Center, workers are working on liver transplant patients, trying to discover better ways to determine why livers reject and to recognize the rejection process. They have found that frequent liver biopses and also frequent nuclear scans are a very good way to improve the detection of the process.

At the Digestive Disease Center at the Mayo Foundation, the investigators are looking at the aging process of the gut, and finding that there are electrical differences in the muscle activity of an intestine that may explain why the aging gut has more problems than the younger gut.

At the University of Iowa, they are interested in problems such as heartburn, and they are looking at factors that regulate the sphincter of the lower esophagus to prevent the regurgitation of acid into the stomach.

At the Digestive Disease Center at Michigan, at Ann Arbor, they have cloned a DNA molecule that produces a pancreatic protein that regulates the secretion of the pancreas and this is an important development in trying to understand how the pancreas functions.

At the Tufts Center in Boston, they have discovered that there is a pancreatic factor that changes the surface coat of a parasite, the giardia, and this allows the parasite to bind to the intestinal wall.

There are a number of other examples that I could cite that are in my prepared testimony, so I hope that you will read the more detailed testimony.

What about the future? What about the problems that are occurring with this program?

Ten applications for these centers were received in September 1984 for possible funding. Nine of those applications received a priority score of 179 or better, an outstanding record for a new center program. Unfortunately, last year, because of the funding limitations, only six of these centers could be funded.

NIADDK asked for additional requests for center applications and currently there are eight applications which have received high priority funding, including one continuing application from a center that has been in existence for 9 years, but because of the present budget situation only one of these outstanding, high priority applications may be able to be funded during this year.

We hope that Congress will reverse this situation, and reestablish its own funding priorities.

Mr. Chairman, in conclusion, the Coalition of Digestive Disease Organizations supports the following recommendations for appropriations for this fiscal year 1986, including $638 million for the NIADDK, $150 million of that Institute's funding to go to the digestive diseases program, $10 million for the Conte digestive disease centers that I have been speaking to you about—this would permit the eight meritorious centers that have current applications to receive funding—$350,000 for the advisory board, and $2 million for the epidemiology and data system, and $500,000 for the National Digestive Diseases Education Clearinghouse.

Mr. Chairman, thank you for the opportunity to appear before you.

Senator PROXMIRE. Thank you very, very much, Dr. Boyer, for your excellent testimony. We certainly appreciate it.

STATEMENT OF CLARENCE LEGERTON, M.D., CHAIRMAN, COMMITTEE ON PUBLIC POLICY AND GOVERNMENT RELATIONS

Senator PROXMIRE. Our next witness is Dr. Clarence Legerton, chairman of the committee on public policy and Government relations, American Gastroenterological Association.

Dr. LEGERTON. I think that it is a bit of an anticlimax for me to be following Ms. Loring. It reminds me of a similar committee testimony that I gave 1 year ago when I followed ex-Representative James Roosevelt, followed by Senator Jacob Javits, followed by a third baseman for the Cubs who has diabetes, Ron Santos. I feel the same way after Ms. Loring.

Senator PROXMIRE. Following Ms. Loring will be harder than following those other people but I am sure that you will do a fine job.

Dr. LEGERTON. My name is Clarence Legerton, and I am a professor of medicine at the Medical University of South Carolina at Charleston. It is my privilege to represent the American Gastroenterological Association, which is a group of over 4,000 doctors who are interested in patient care and research in the field of digestive diseases.

First, Senator Proxmire, the American Gastroenterological Association wants to thank the committee that you serve on for the work done last year to increase funding for the NIH, and specifically for the NIADDK, of course, where the digestive diseases find themselves.

Last year, your committee increased funding for the digestive disease centers, and we feel that these centers are vitally important because they bring together clinical and basic science investigators to enhance and to extend the effectiveness of research in the field of digestive diseases.

The digestive disease centers, as you know were initiated in 1984, and already they are beginning to show results in this coordinated, multidisciplinary effort to enhance research in institutions of excellence around our country.

This committee, and its House counterpart, decided 2 years ago that they would fund, in addition to the centers, a Digestive Diseases Advisory Board, that Dr. Boyer mentioned a moment ago, the Information and Education Clearinghouse, and the data program. We are very much indebted to the committee for that action.

The American Gastroenterological Association does support a modest increase in the digestive diseases research budget in the NIADDK for the figure of about $637 million. We also support the level of funding suggested by the Coalition of Digestive Diseases Organizations which are shown on the factsheet which I believe is circulating in the room.

Additionally, we support the overall position of the ad hoc committee on medical research funding which has proposed an NIH research level of $5.7 billion.

We know that these are stringent economic times, and I echo what someone said a moment ago, it must be very difficult for you Senators to deal with all of these different interests, but we do recognize, as many have said, that we have great opportunities in research. We are standing on the threshold of some breakthroughs, and we feel we should not default on this.

Limitations of time constrain me from going into some of these possible research opportunities that we have, but I would like to point out four things that are very negative about digestive diseases.

The first of these is that 10 percent of the total economic burden of illness in the United States is caused by digestive diseases.

Second, digestive diseases are the primary reason for major surgery, and the leading cause of hospitalization in the United States.

Third, 20 million chronic illnesses and 14 million acute episodes of illness, and 190,000 deaths each year are directly attributable to digestive diseases. Over $17 billion in indirect health care costs, and over $35 billion of total annual economic loss are caused by digestive diseases.

If we are to reduce these staggering health and economic burdens afflicting our people, we have got to do it through advancing research, and research to be productive, as many of the others who testified have said, requires at a minimum that it have steady funding, to be dependable, and to be adjusted yearly for inflation.

Senator Proxmire, we appreciate very much the opportunity of giving this testimony to you, and I am very happy that the red light just went off.

PREPARED STATEMENT

Senator PROXMIRE. Thank you very much. You are terrific, you finished right on time. Your submitted statement will be entered into the record at this point.

[The statement follows:]

STATEMENT OF DR. CLARENCE LEGERTON

Mr. Chairman, I am Clarence W. Legerton, M.D., Professor of Medicine at the Medical University of South Carolina at Charleston. I represent the American Gastroenterological Association which has over 4,000 physician members concerned with the improvement of patient care and research in the field of digestive diseases.

First, Mr. Chairman, the American Gastroenterological Association thanks you and the members of your committee for your work last year in increasing rapidly the funding for the National Institutes of Health, and specifically for the NIADDK. We recognize that the problems you face this year, in coming to a decision about funding for the NIH, are exacerbated by the difficulties posed by the proposed reduction from the 6,500 new grants level, and additional funding for centers such as the digestive diseases centers, to a level of 5,000 grants, and considerably less funding for centers. We deeply appreciate the work that you have done to arouse congressional sentiment in regard to support for NIH programs, and want to indicate to you that you have our full support in your endeavors. I know that a large number of witnesses have come before you already, and more will come after me, to make the case for the largest possible increases for the NIH at this time of expanding research.

Last year you increased funding for digestive diseases centers, even beyond that funding made available in the previous year. These digestive diseases core centers are new instruments for research in the field of digestive diseases, and these core centers work to bring together, on a cooperative basis, clinical and basic science investigators to enhance and extend the effectiveness of research in digestive diseases.

The NIADDK has drawn the research activities of the centers so that they may be relevant to the underlying cause, mechanism, diagnosis, early detection, prevention, control, and treatment of digestive diseases and related physiological, pathophysiological, congenital, or metabolic disorders resulting from such diseases. The focus can be on a disease, such as pancreatitis, functional bowel disease, or inflammatory bowel disease. Or the focus can be on an organ such as the liver, esophagus, or large bowel. Or the focus can be on a process such as absorption, secretion, or motility. Or a core center may involve an appropriate combination of areas which may also include relevant technology.

You will recall, Mr. Chairman, that these core centers were initiated in fiscal year 1984 and so far those centers which have been established focus on the liver and its diseases, normal and abnormal motility of the digestive tract, diarrhea, gut hormones, and the functional morphology of the digestive tract. The American

Gastroenterological Association is very pleased to learn that the NIADDK intends to continue this coordinated, multidisciplinary approach in institutions with demonstrated research excellence.

Mr. Chairman, these centers were not established by authorization legislation -- as you know, the NIH reauthorization bill has not been renewed -- because of numerous controversies involving questions in no way related to digestive diseases research. This committee, and its House counterpart, decided two years ago that it would fund, through the general 301 research authority that the NIH now possesses, not only the centers, but also the Digestive Diseases Advisory Board, the Information and Education Clearinghouse, and the Data Program. We are deeply grateful to you for that.

Additionally, because we are advocates of digestive diseases research, we want to indicate to you that we fully support a modest increase in the digestive diseases research budget at the NIADDK, as well as a level of funding for the NIADDK at $637,997,000, as supported by the coalition of Voluntary and Professional Associations who work with that institute.

Also, we support the overall position of the Ad Hoc Group for Medical Research Funding for all of the NIH, which has proposed an NIH research level of $5.7 billion.

We all recognize that these are stringent economic times, but we also recognize the burgeoning opportunities available for us in biomedical research, and specifically in digestive diseases research.

You will hear from my colleagues who are on the panel with me today of the opportunities available in liver transplantation, in the digestive diseases research centers generally, and in various clinical areas, and of the remarkable opportunities now available for endoscopy to be used as a tool to further digestive diseases research.

However, Mr. Chairman, I think that it would be wise for us to step back for a moment from the specifics of proposed digestive diseases research to take a look at the overall picture.

For more than a decade, the American Gastroenterological Association has appeared before the Appropriations Committees, and the authorization committees, of the Congress seeking to have the concerns of researchers and clinicians in the field of digestive diseases more fully understood, by laying out for you the severe negative impact of digestive diseases on our population.

Let me review those numbers for you today.

1. Ten percent of the total economic burden of illness in the United States is caused by digestive diseases.

2. Digestive diseases are the primary reason for major surgery and the leading cause of hospitalization in the United States.

3. Twenty million chronic illnesses, 14 million acute episodes of illness each year, and 190,000 deaths annually, directly attributable to digestive diseases as the immediate cause of death, are caused by digestive diseases.

4. Over $17 billion in indirect health care costs, and $35 billion of total annual economic loss is caused by digestive diseases.

I have taken the time to stress here the serious negative impact of digestive diseases rather than dwell on the very many research opportunities which now seem to be available to us.

I have done this for a specific reason: Because you and the Congress are faced with making a major decision about the expenditure of public funds for biomedical research. I thought that it might be useful to take the time to explain the serious negative impact, just as you are faced with the issues carried over from fiscal year 1985 relating to the NIH budget, and just as you are about to make decisions about the fiscal year 1986 budget.

Once again, Mr. Chairman, we thank you for the opportunity you have given us to testify before you and would be pleased to answer any questions that you may have.

STATEMENT OF ROBY C. THOMPSON, JR., M.D., AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

PREPARED STATEMENT

Senator PROXMIRE. We will now hear from Dr. Thompson of the American Academy of Orthopaedic Surgeons.

Dr. THOMPSON. Senator Proxmire, I am Roby Thompson, professor and head of the department of orthopaedic surgery at the University of Minnesota, and first vice president of the Academy of Orthopaedic Surgeons.

I have prepared a formal statement, which I would like to request be inserted in the record.

Senator PROXMIRE. Without objection, it will be printed in full in the record.

[The statement follows:]

STATEMENT OF DR. ROBY C. THOMPSON, JR.

Mr. Chairman and members of the Committee, I am Roby C. Thompson, Jr., M.D., Professor and Head of the Department of Orthopaedic Surgery at the University of Minnesota School of Medicine in Minneapolis and the First Vice President of the American Academy of Orthopaedic Surgeons.

I am pleased to appear before you today to present the Academy's position on the need for continued and, if possible, expanded funding for research in disorders of the musculoskeletal system.

The musculoskeletal system is composed of the muscles, bones, joints, tendons and ligaments that provides us the ability to perform tasks of everyday living. It makes up more than 70 percent of the body, and provides support and protection for the entire body.

For the body to function normally, the unique tissues that make up this body system are organized into functional units controlled by the nervous system. While most disorders of the musculoskeletal system are not life threatening, collectively they have an enormous impact on the quality of people's lives. In fact, 23 million Americans have musculoskeletal impairments with a limitation of function that is chronic or permanent. Moreover, the cost to our society for diseases and injuries of the musculoskeletal conditions exceeds $65 billion every year.

Studies have shown that one of every seven persons in the United States suffers from some form of musculoskeletal disease or disorder. The following are a few of the more common ones:

Arthritis. Although there are more than 100 different types of arthritis, the most common are:

> Osteoarthritis is the most common form of arthritis. The causes of this condition are unknown but it has been associated with aging and wear and tear on the joint. Although osteoarthritis can be seen in all age groups, it occurs more frequently in persons over 50 years old.
>
> Rheumatoid arthritis is an inflammatory joint disease that usually pursues a slow and relentless course. Although periods of remission can occur, affected joints are left permanently damaged. Approximately 5 million Americans suffer from rheumatoid arthritis, with women being affected twice as frequently as men. The cost associated with rheumatoid arthritis is in excess of $8.6 billion annually.

Osteoporosis. The diminished bone density associated with osteoporosis is the most important cause of bone weakening. This makes osteoporosis a major risk factor for fractures of the hip, spine and pelvis in the elderly.

The incidence of osteoporosis increases dramatically with age and women are much more frequently affected than men. A study of a group of Michigan women aged 45 and older showed that more than half had evidence of osteoporosis by x-ray exam. After 75 years of age, osteoporosis can be demonstrated in nine out of 10 women. It is believed that about 70 percent of all fractures occurring in women older than 45 are related to osteoporosis. It is estimated that osteoporosis accounts for more than $6 billion in economic costs annually.

Congenital Malformations of the Musculoskeletal System. Newborn babies who are malformed are more likely to suffer from malformations of the musculoskeletal system. The most common is spina bifida, which results from the failure of the back of the spinal column to fuse during early fetal development. If the spinal cord also is involved, the problem becomes extremely complex. In such situations, when the child survives -- significant impairment or paralysis is permanent. This imposes an enormous burden on the infant and the family. Other common congenital malformations that require lengthy treatment periods include club feet and dislocated hips. More than $1 billion in costs annually is attributable to musculoskeletal congenital malformations.

Back Pain plagues about 31 million Americans. It can be caused by a variety of traumatic and degenerative conditions. It is one of the most common and significant musculoskeletal problems in the United States, and the most frequent cause of activity limitation and loss of work-time in persons under the age of 45, after heart conditions and arthritis, in persons between the ages of 45 and 64. Each episode of back pain causes an average of 12 days of bed disability annually. Back pain accounts for almost $16 billion in economic costs each year.

Research on the diseases and disorders of the musculoskeletal system is supported primarily by the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases through its Division of Arthritis, Musculoskeletal and Skin Diseases.

Mr. Chairman, the investment of government funds in biomedical research over the past two decades has resulted in a substantial payoff to the taxpayer, and more importantly to those individuals afflicted with musculoskeletal diseases. Basic research is the lifeline of improved patient care. Each new bit of information, added to the previously existing scientific data base, contributes to clinical advances and the alleviation of human suffering.

Treatment of musculoskeletal diseases has dramatically changed over the past 15 years, as a result of improved knowledge of the basic nature, causes and natural history of the disease processes. New technology involving diagnostic and treatment modalities has greatly improved the results afforded to people suffering from afflictions of the musculoskeletal system.

Some of the new advances which have expanded to the science base include:

> Basic structure and physiology of connective tissue: Recent studies have demonstrated that disorders of the bone cells, and the proteins which they produce, may be responsible for most cases of osteoporosis.
>
> Studies on the mechanism of synthesis and degradation, of hyaline cartilage and its mechanical functions, have opened the door to an understanding of the causes and pathophysiology of degenerative joint disease (i.e.osteoarthritis).
>
> Studies on the healing mechanisms of ligaments and tendons have led to improved methods of treatment and rehabilitation -- particularly as related to athletic and hand injuries.

Joint structure and function: Studies of the complex motion and load-bearing function of joints have revolutionized the approach to reconstructive joint surgery and provided longer lasting, more normal artificial joint replacements. Also, the budding knowledge as to the interaction between altered mechanical function and joint degeneration holds promise of developing methods of preventing osteoarthritis.

These advances have contributed toward restoring people to productive life, improving the overall quality of life, and equally important, reducing the length of hospitalization and time spent in nursing homes due to musculoskeletal problems.

Although we have learned much about these diseases and we have substantially improved our treatment programs, we must continue our research in order to improve our treatment programs and ultimately launch prevention programs.

Specialized Centers of Research

Mr. Chairman, research in the areas of osteoarthritis, rheumatoid arthritis, and osteoporosis have progressed to the point where a concentrated multidiciplinary research effort should be initiated. A successful mechanism used by many of the NIH Institutes to provide a highly effective means of concentrating research personnel, resources and facilities on diseases of national importance is the "Specialized Centers of Research".

These specialized centers of research provide a valuable compliment to an Institute's portfolio of investigator-initiated research projects. This mechanism provides an institute with the means of stimulating wider research interest in selected high priority areas, and more importantly, these centers insure that adequate support is provided for clinically oriented basic science and its application to clinical problems.

Mr. Chairman, we respectfully urge the Committee to set aside funding at a level of $7.2 milion for at least nine specialized centers of research -- 3 in each of the major disease areas -- osteoarthritis, rheumatoid arthritis, and osteoporosis. These diseases afflict the fastest growing segment of our population, namely, those individuals over 50 years of age. Unless we take advantage of the research opportunities now before us, the frequency of occurrence and impact of musculoskeletal conditions will become greater in the future.

The efforts of this committee to maintain the momentum in science and its attempts to bring hope to those individuals suffering from disease, are severely cut in the 1986 budget. While we fully appreciate the difficult fiscal conditions under which you are operating, we believe, like Emerson, that "Health is the first wealth", and thus the government must provide for the sound health of its citizens today and into the future. It is with this in mind, that we respectfully urge this committee to provide $638 million for the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases of which $127 million should be allocated to the Arthritis, Musculoskeletal, and Skin programs.

On behalf of the over 11,000 members of the American Academy of Orthopaedic Surgeons, I want to thank you for your past support and for giving me this opportunity to testify before you today.

I will be happy to answer any questions.

Dr. THOMPSON. Thank you.

Many patients with musculoskeletal disorders and the public in general have benefitted greatly from the investment that Congress has made in basic research through the NIADDK, a division of NIH, in the past 10 to 15 years. Understanding how bone functions and what its mechanical properties are have allowed the development of much improved artificial joints for replacement of diseased and destroyed joints from rheumatoid arthritis, osteoarthritis, and other disorders that affect the joints.

In addition, these basic, fundamental facts have allowed us to improve our management of fracture patients to the point where, for example, the patient with a fracture of the femur or the thigh, some 10 or 15 years ago, could expect to be in the hospital, in a bed, in a body cast, for 10 to 16 weeks. Today, that same patient could expect to be out of the hospital, walking with crutches in 10 to 12 days.

The same type of research in the basic, fundamental connecting tissues has allowed us to change our entire management of injuries to the joints and ligaments. This is a direct of research funded through the NIADDK. We are now able to immobilize those joints earlier and get more successful return to normal function in a much shorter period of time.

A good example of that is in our own hospital in the last 2 years, we have been able to reduce the hospital stay for patients that are having shoulder surgery, where the tendons or ligaments are repaired, or where shoulder replacement is done, by 5 to 7 days, and at the same time achieve the end result that we receiving previously with longer hospitalization.

There are certain areas, such as osteoarthritis, rheumatoid arthritis, and osteoporosis, that are going to be big ticket items for our future by virtue of their relationship to the aging process and the aging of our population. The research base on these particular disorders has now reached a point where we agree with the previous witnesses that bringing together multidisciplinary teams in specialized centers of research holds great promise for allowing rapid advances in those three diseases.

The efforts of this committee to maintain a momentum in scientific breakthroughs for the future of our citizens has been admired and respected by the 11,000 members of the Academy of Orthopaedic Surgeons, but we would like to again support the recommendations of previous witness, that a $638 million appropriation be made for the NIADDK, with $127 million allotted to the musculoskeletal division and arthritis.

Senator Proxmire, thank you very much.

Senator PROXMIRE. Thank you very much, Dr. Thompson. Your testimony was very impressive, particularly the description of research that has resulted in hospital stays of days for fractures that used to require weeks of hospital care. That information was most impressive.

STATEMENT OF ROBERT W. SCHRIER, M.D., CHAIRMAN INTERSOCIETY COUNCIL ON KIDNEY AND UROLOGICAL DISEASES

Senator PROXMIRE. Our next witness is Dr. Robert Schrier, chairman of the Intersociety Council on Kidney and Urological Diseases.

Dr. SCHRIER. Thank you, Mr. Chairman, for the opportunity to comment on the appropriations for the National Institute of Arthritis, Diabetes, Digestive, and Kidney Diseases for fiscal year 1986. I am Robert Schrier, and I appear on behalf of the Intersociety Council on Kidney and Urological Diseases, which represents all the kidney and urological organizations in the country. That organization has given serious thought to the major problem and has caused a lot of public concern, as well as concern in the medical community about the $2 billion in health care costs that are going to treat end-stage renal failure in 70,000 individuals in this country every year.

The number of individuals that have kidney and urological diseases is about 15 million. If you add 30 million patients with hypertension onto that, which is caused by renal disease or is causing renal disease, one has over 50 million individuals involved.

We think that what we have done is to organize what we like to call a war on kidney disease, to prevent individuals from going on the end-stage renal disease. We think that this will take a multidisciplinary approach where we bring basic and clinical scientists together, and emphasize cause and prevention.

There will really be two focuses in this. One will be centered in the private community, and this will be on public and professional education. We will fund it from the private sector. This will be extremely important. Let me just give you an example.

Hypertension, for example, to control hypertension will cost maybe $400 a year. If hypertension is not controlled because of a lack of public or professional education, a stroke will lead to hospitalization and rehabilitation costs of about $79,000 a year. We think that this is an extremely important component.

The second component of it is the component that we would like to speak to you about, and that would be research and prevention centers in the areas that are leading to end-stage renal disease.

You have heard about diabetes today, and that is one of the major problems leading to end-stage renal disease. It accounts for betwen 20 and 25 percent of all patients on dialysis or transplantation, and now it is clear that you can reverse and prevent diabetic kidney disease in experimental models. There is absolutely no question about that. There is also no question that the rapidity in end-stage renal disease with diabetes is based on the level of high blood pressure, and what we have been calling control is probably not adequate it probably isn't control. Third, that the controlled blood sugar and protein intake is extremely important.

So we are proposing a center on kidney disease and diabetes, and a second center in the area of glomerulonephritides and kidney disease, a third center in the area of hypertension and kidney disease, and 28 percent of end-stage renal failure patients have in-stage renal failure due to hypertension, that is the No. 1 cause in the black population.

A third area in drugs, anticancer and antibody drugs are causing a lot of kidney disease. Cyclosporine, which has caused improvement and survival of cadaver kidneys from 45 up to about 75 or 80 percent, the major complication is kidney disease. As you know, it is now being used in diabetes as you have heard testimony. So if we can understand how it causes kidney disease, it can be used much more effectively.

We are also proposing a center in hereditary diseases and obstructive diseases, and in cell injury. We think it is realistic that we could decrease the number of patients going on dialysis and transplantation by 25 percent. If one takes 25 percent of $2 billion a year, one is talking about a $500 million savings. So $6 million going into six centers focused on these major areas that are leading to end-stage renal disease, coupled with a professional and public education program that would be privately supported, I think, in this time of fiscal constraints and controlling health care costs would have major benefits from a human point of view, from a fiscal point of view, and I would strongly encourage Congress to support this concept.

Incidentally, we have talked to Senator Hatfield about this, and I think that he is very enthusiastic. You have heard the advances that have been made in cancer, heart, and lung, and arthritis, and digestive diseases by this multi disciplinary approach rather than having everybody going in every different direction, but focused on these major causes.

Kidney disease is the one area that has been left out, and part of that is our problem. But now the whole intersociety council has come together, formulated this plan, and it is 100 percent behind it. I think that we can have a major impact on the prevention of progression and a cure, and we hope to put the dialysis machines in the museum over the next 10 years.

PREPARED STATEMENT

Senator PROXMIRE. Thank you very much, Dr. Schrier, for your fine testimony. Your submitted testimony will be placed in the record at this point.

[The statement follows:]

STATEMENT OF DR. ROBERT W. SCHRIER

Thank you for providing me with the opportunity to comment on the appropriations for the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (NIADDK) for the fiscal year 1986. I am Robert W. Schrier, M.D., Chairman, Department of Medicine, University of Colorado, President of the National Kidney Foundation, and Immediate Past President of the American Society of Nephrology. I appear before you today as Chairman of the Intersociety Council on Kidney and Urological Diseases made up of the following nine organizations:

American Association of Clinical Urologists,
American Heart Association Council on the Kidney,
American Society of Artificial Internal Organs,
American Society of Nephrology,
American Society of Pediatric Nephrology,
American Society of Transplant Physicians,
American Urological Association,
National Kidney Foundation, and
Renal Physicians Association.

Mr. Chairman, the Intersociety Council on Kidney and Urological Diseases, representing virtually all groups active in research and the treatment of kidney and urinary tract disorders, has carefully and thoughtfully developed a program that might be termed a "mini-war" on the diseases that lead to End-Stage Renal Disease (ESRD), necessitating dialysis and transplantation. The Intersociety Council recommends that the Congress provide funding for six multidisciplinary, basic and clinical research centers focused on the major causes of ESRD as follows:

Research and Prevention Center for Hypertension and the Kidney

Hypertension is the most common cause of ESRD in blacks (28% of the ESRD population) and contributes to loss of kidney function in other types of kidney disease. Research about the mechanism of injury and and prevention of hypertension-induced ESRD is direly needed.

Research and Prevention Center for Diabetes Mellitus and the Kidney

Diabetes mellitus accounts for 20% of new ESRD patients. Experimental models of the kidney lesion of diabetes show the disease is reversible. Kidneys from diseased animals show a regression of damage when transplanted from diabetic to normal animals. Research on diet, control of blood sugar, and hypertension should result in clinical approaches to delay the progression of kidney failure in the diabetic patient.

Research and Prevention Center for Obstructive and Heredity Diseases of the Urological System and the Kidney

Obstruction of the urinary tract may lead to abnormal function of the bladder and the ureter, and eventually ESRD if not corrected. Further understanding of neuropathic diseases of the urinary tract, congenital anomalies (such as ureterovesical reflux or posterior uretheral valve), and benign hyperplasia of the prostate can help prevent obstructive renal injury. Polycystic kidney disease is a hereditary disease which is responsible for 10-15% of new ESRD patients. Research using gene-linkage techniques should allow early diagnosis and genetic counseling can then diminish the incidence of this autosomal-dominant disease.

Research and Prevention Center for Nutrition, Toxins and the Kidney

The toxic effects of protein, phosphorus, and perhaps certain lipids, have been proposed to accelerate renal failure in all kidney disease. Progression to ESRD may therefore be prevented or delayed with proper dietary manipulation. Various important drugs such as antibiotics and anti-cancer drugs, have injurious effects on the kidney, and research should lead to approaches that will allow the use of these drugs without injury to the kidney.

Research and Prevention Center for Immunology and the Kidney

The most common cause of ESRD is a group of diseases categorized as glomerulonephritis. Most are due to the destruction of tissue by immunologic mechanisms - antibodies or "killer" lymphocytes. New drugs that suppress antibody formation or limit lymphocyte production are now available and research is needed to examine whether they prevent progression of certain types of nephritis. The effect of monoclonal antibodies on the course of different glomerulonephritides needs substantial research. Research in these areas will also be relevant to the rejection process in transplantation.

Research and Prevention Center for Cellular Injury and the Kidney

At this center research efforts will focus on the identification of basic processes that lead to renal cell injury and death, and thus allow the better development of preventive measures. Research in this area will have implications for injury of other tissues such as the heart, brain and liver.

The mission of each Research and Prevention center would be (1) to organize basic research aimed at factors which cause renal damage and develop approaches which prevent or reverse the deleterious effects, (2) to develop and execute appropriate clinical trials, and (3) to formalize prescriptions for treatments to reverse and prevent progression of renal disease.

The goal, which the Intersociety Council believes can be attained, is a profound reduction of the major causes of kidney diseases by the early 1990's. One important aspect of this research and prevention program would be a dramatic reduction in Medicare disability payments for dialysis and transplantation. Medicare (not to mention state-supported programs) presently reimburses over $2 billion per annum for ESRD programs. The Intersociety Council believes that with intensification of research as proposed in the centers the number of new patients entering the ESRD program can be reduced substantially (approximately 25%) over the next decade, resulting in a remarkable reduction in the number of patients requiring treatment. This would lead to dramatic cost savings for the federal government.

Mr. Chairman, it should be emphasized that this is the first time the Kidney/Urology Community has appeared before this Subcommittee requesting directed funding for research initiatives. Indeed, the present body of knowledge has been developed through the traditional funding mechanisms of the National Institutes of Health. Until recently this has been appropriate for research needs and potential in the area of kidney and urological diseases. However, the time has arrived for the science developed by individual investigators to be directed to a multidisciplinary and multi-institutional setting. We are now on the threshold of major advancements and this "state of the art" research in kidney and urinary tract diseases demands cooperation to assure its maximum benefits in human and economic terms. This is the reason for our proposal to establish multidisciplinarian Research and Prevention Centers.

You should also know that the National Kidney Foundation and its 50 affiliates has designed a complementary health promotion and education program to complement the research aspect of the six center concept. This professional and public education program will provide the demonstration component for the Research and Prevention Centers and will be funded from the private sector. The Intersociety Council proposes that you provide a total of six million additional dollars to the National Institute of Arthritis, Diabetes, Digestive, and Kidney Diseases for six Research and Prevention Centers, one each in:

Hypertension and the Kidney,
Diabetes Mellitus and the Kidney,
Obstructive and Heredity Diseases of the Urological System
and the Kidney,
Immunology and the Kidney, and
Cellular Injury and the Kidney.

The benefits-to-costs ratio - in terms of both dollars and the human condition - resulting from implementation of these six centers will be immense. I therefore respectfully urge you to provide the funding for these six Research and Prevention Centers in your legislation.

STATEMENT OF JOHN PAPP, M.D., PRESIDENT-ELECT, AMERICAN COLLEGE OF GASTROENTEROLOGY

Senator PROXMIRE. Our next witness is Dr. John Papp. Dr. Papp is the president-elect of the American College of Gastroenterology. We are glad to have you, sir.

Dr. PAPP. Thank you, sir.

Because of time constraints, I would like to just tell you that I am a practicing gastroenterologist representing the physicians who take care of patients with gastrointestinal diseases. We have six specific recommendations, and then I would like to show you an instrument which is a new advance in treatment.

We would recommend to you that the National Institute of Arthritis, Diabetes, Digestive, and Kidney Disease be funded at $638 million for fiscal year 1986; that the Digestive Disease Division of that be funded at $150 million; that the Conte Digestive Disease Center programs, as others have stated, be funded at $10 million; that the Digestive Disease Advisory Board be funded at $350,000; that the epidemiology and data system be funded at $2 million; and that the National Digestive Disease Education and Information Clearinghouse be funded at $500,000.

In our testimony, we have described some new advances in clinical medicine which have saved many lives, have reduced the cost of medicine. Today, I have brought with me an endoscope which I would like you see.

This endoscope is passed, with the patient asleep, and if the patient has a common duct stone after surgery, they might have left a stone or missed a stone, we can go down with this instrument, look down and find a 2 millimeter hole, put a catheter in it. We put a wire in, and we cut the duct open, pull the stone out with a little balloon catheter, and that saves the patient many days in the hospital. When the patient wakes up, can eat, can go home almost the next day.

I think that it is so exciting that you might like to see the instrument and handle it for a moment.

Senator PROXMIRE. Is it done while the patient is under anaesthesia?

Dr. PAPP. The patient gets a little intravenous valium. The patient never goes to surgery, doesn't have any surgical costs. It is done in the endoscopy suite, almost as an outpatient, not quite to that stage yet.

Senator PROXMIRE. So there is very little pain.

Dr. PAPP. There is no pain, no pain at all. I did this a few years ago, and everyone seemed to be quite interested.

This is a fiber optic endoscope. You can see the tip there. This is a high power light source. It gives us light when it comes down through here. This is the snare that we put through, and I will put through. The snare has a wire in it which is attached to a power unit. We can transmit electrical energy through this wire, and it will come out at the end. We put our eye here, and you can see the optics.

Senator PROXMIRE. I think I can see something.

Dr. PAPP. At a very high power, you can see everything. Let me show you the wire.

Senator Proxmire. How much does this instrument cost?

Dr. Papp. This instrument costs $11,000. From the patient standpoint, the cost is about one-third less than surgery, and that is just for the procedure. When you reduce hospitalization costs, it is amazing.

If you will look at the wire at the end, you will see that there is a little fine wire here, and that wire, if you open the snare, will curl. When you curl, you cut open the tissue. You can control your cutting, and when you are done, you hook the wire and pull out the snare, and the surgery is done. It takes about a half-hour.

The patient wakes about an hour later, and you feed the patient, and then he can go home.

PREPARED STATEMENT

Senator Proxmire. Thank you for a fine presentation. Thank you very much. We will insert your statement in the record.

[The statement follows:]

STATEMENT OF DR. JOHN PAPP

Funding Recommendations for Fiscal Year 1986
The American College of Gastroenterology

A. National Institute of Arthritis, Diabetes, Digestive and Kidney Disease: $638 million. This level of funding would provide a modest growth rate for the institute and provide for the stabilization of the centers programs at the institute.

B. Digestive Disease Division: $150 million of the institutes funding for the Digestive Disease Division of NIADDK. This level would represent a degree of parity among the institute priorities.

C. Conte Digestive Disease Centers Program: $10 million. This level of funding would allow the NIADDK to fund the meritorious centers research grant applications received in recent months.

D. DD Advisory Board: $350,000. The outstanding efforts of the DD Advisory Board should be funded at a rate very similar to other advisory boards.

E. Epidemiology and Data System: $2 million. To support the substantial effort being conducted to establish liver transplant data, endoscopy data, and basic digestive data and information.

F. National Digestive Disease Education and Information Clearinghouse: $500,000. To support the current outstanding efforts to provide education and information to thousands of patients, family members and professionals concerned with diseases of the digestive system.

Mr. Chairman and members of the subcommittee, I am Dr. John P. Papp, a physician in private practice , specializing in the treatment of gastrointestinal disease. Today, I come before you as the National Affairs Chairman, and President-Elect of the American College of Gastroenterology (ACG). ACG has a deep commitment to clinical research and its subsequent application to the treatment and care of patients ill with gastrointestinal disease.

Today, I would like to spend my time relating some of the very exciting clinical advances made recently to diagnose and treat diseases of the digestive system. Many of these clinical applications of technology and medical practice are borne from the basic and clinical research being performed through NIH's research grants and centers programs.

Gallstones affect 10% or more of our population. At times stones develop in the bile ducts, stones may pass from the gallbladder into the bile duct, or stones may have been left in these ducts following removal of the gallbladder. These stones may obstruct the ducts with, at times, serious consequences. There is now a way to remove these stones without performing an abdominal operation. Through an endoscope introduced into the upper gastrointestinal tract, we can divide the sphincter muscle where the bile ducts enter the duodenum and thus enlarge the opening of the bile duct and make it possible for stones to pass spontaneously, or be removed from the duct with instruments by the endoscopist. If endoscopy is used, it is not necessary to perform an abdominal operation with its associated morbidity and days spent in the hospital. Thus, costs may be significantly diminished. Removal by endoscopic spincterotomy costs about one third as much as does removal by abdominal surgery.

Investigators have learned a great deal about the composition of gallstones and about the conditions in bile that can lead to gallstone formation. This led to a medical treatment for gallstones. Chenodeoxycholic acid and ursodeoxycolic acid have been found to cause the dissolution of gallstones. This may take months, be effective only in some patients, and have to be followed by continued intake of the medication to prevent recurrence of the stones; nevertheless, for certain patients who are poor operative risks, this procedure may be preferrable to surgery. Now there is evidence that it may be possible to dissolve stones by the introduction of an ether into the gallbladder. A needle and catheter is passed through the abdominal wall, through the liver, and into the gallbladder itself. This procedure has been tried on only a few patients, but the promise is that such a treatment could eliminate the need for gallbladder surgery, in at least some cases. Hopefully, it may ultimately be possible to pass a catheter up the bile ducts, into the gallbladder, and introduce a solution in this way, thus avoiding the introduction of a needle through the liver. It has already been possible in some cases to introduce a substance, such as monactonoin, into the bile ducts and dissolve stones in the ducts.

Studies of the cause of peptic ulcer have indicated that gastric acid is a key element. Histamines and the hormone gastrine have been found to be involved in the control of gastric acid secretion. To diminish the amount of acid secreted, a drug that limited or prevented histamine stimultion of secretion was developed. It was known that the histamine involved in acid secretion was somewhat different from that involved in allergy, and drugs which controlled the histamine secretion. Therefore, the latter was designated as histamine II. A drug that specifically controlled histamine II, cimetidine, has been developed and is in use. It has a potent effect in diminishing acid secretion, and has proved valuable in the treatment of peptic ulcer, in decreasing the complications that can cause both morbidity and mortality, and in lessening the need for ulcer surgery. The use of this drug has significiantly cut the cost to the nation of the treatment of peptic ulcer. There are attempts to develop new drugs of this type that are more potent and have less side effects, However, an entirely new approach to diminishing acid secretion has been developed as a result of recent studies of the mechanism of acid secretion. An enzyme, hydrogen potassium ATPase, has been found to be important in the formation of acid. The form of the enzyme in acid secreting cells, has an SH group, that is not present on the enzyme in other parts of the body. It was possible, because of this pecularity, to develop a medication that specifically inhibits this enzyme in the acid secreting cells. This new drug has been tried in patients who have the Zollinger-Ellison syndrome, a disorder associated with a very serious problem with ulcer because of the very high acid secretion. The drug has been effective in these patients. However, side effects, including carcinoid tumors, have been demonstrated in some animals. If these side effects can be avoided by modifications of the drug, there may be a new approach to the treatment of peptic ulcer. The suppression of acid by the drug is prolonged, which may prove an advantage.

Acute attacks of diarrhea are one of the most common digestive disorders. Usually there is only minor disability and a short loss of time from work. However, in children in the United States, in travelers, and in under-developed countries, especially where cholera is common, diarrheas can present a serious problem. The disorder can be dangerous if there is a loss of large amount of fluids through the bowel, and consequent development of serious dehydration. Cholera was often fatal, until it was realized that many liters of diarrheal fluid could be lost per day. However, life could be maintained if the fluids and electrolytes were replaced. This can be done by the administration of sodium, potassium, chloride, and bicarbonate, together with glucose, by mouth. Large amounts of fluid and electrolytes could then be absorbed and provide replacement of fluids, even when there were very large losses. This development made it possible to treat these serious cases without admission to a hospital and has led to major savings in the cost of medical care for these disorders.

In the area of liver disease, hepatitis is a common problem. Studies of the Hepatitis A and B viruses led to the development of a vaccine for Hepatitis B and one soon may be available for Hepatitis A. With a vaccine it may be possible to prevent Hepatitis B in those who are commonly exposed to the virus and are particularly susceptible. Because this disorder has been linked to cancer of the liver, and because it can be the cause of chronic disease and death, its control is particulary important.

In the United States, cirrhosis is the liver disease that most commonly causes death. One of its common, potentially fatal, complications is hemorrahage from dilated veins in the esophagus. Recently one procedure has been developed to prevent such hemmorrhage; that is, injection of a coagulating agent into dilated veins in order to cause them to clot. If this treatment proves as effective as early studies suggest, it may considerably diminish the frequency of esophageal hemorrhage and the mortality, associated with it as well as the considerable costs of treatment of such hemorrhage, which may involve multiple transfusions, and many days of hospitalization. For treatment of hepatic encephalothapy, the administration of branched chain amino acids has led to improvements in some cases.

For end stage liver disease, liver transplantation has become a acceptable form of therapy. Improvement in the technique of the operation and methods of immunosuppression has increased survival for the first post-operative year to the range of 70%. This procedure has saved the lives of children with biliary atresia, adults with primary biliary cirrhosis, and with other fatal liver disorders.

Chronic inflammatory bowel disease remains a serious problem. Surgery with resection of the colon can provide the patient with a cure for ulcerative colitis, but the price has been an ileostomy, a device to collect feces. Two procedures have been developed in which a device is not required. In one, a pouch is formed out of ileum where the waste may collect and then be emptied by the patient at appropriate intervals. While this procedure has its problems, on the whole it has been satisfactory for many patients. Another approach has recieved increased attention recently; that is, the ileo-anal anastomosis. Sometimes a pouch of ileum is formed between the ileum and the anastomosis to the anus. Since all mucosa of the colon and rectum is removed during this procedure, there is not a recurrence of the ulcerative colitis. This procedure has been helpful for some patients, but because of diarrhea has not been entirely satisfactory for others.

Mr. Chairman, to continue the superb efforts being conducted at NIH through the funding of grants and centers programs, a consistant commitment of federal resources is necessary. The President's budget proposals, and the Office of Managment and Budget are making this effort impossible. Reductions in funding, and elimination of grants and centers programs proposed by OMB and the President's budget will clearly neutralize the positive progress of the nation's greatest researchers and clinicans.

The American College of Gastroenterology would like to take the opportunity to applaud the magnificent efforts and accomplishments of the Digestive Disease Advisory Board, who meet to plan for the prevention, and treatment of digestive diseases. Similary, please allow me to praise the Digestive Disease Epidemiology Data System, which is making exciting progress in data collection and use, and the Digestive Diseases Education and Information Clearinghouse which has served many professional and lay persons and organizations.

This concludes my testimony, Mr. Chairman. I am pleased to respond to any questions you may have.

STATEMENT OF JOYCE WILLIG, COPRESIDENT, CONNECTICUT CHAPTER, AMERICAN LIVER FOUNDATION

Senator Proxmire. Our next witness is Joyce Willig, the copresident of the Connecticut chapter of the American Liver Foundation.

Ms. Willig, it is nice to have you. I am sorry that your Senator is not here, but he is chairman of the subcommittee and he is with you all the way.

Ms. Willig. Dr. Papp came with equipment, but I promise that I am not going to show you my scars.

I am Joyce Willig, and I am representing the American Liver Foundation, a coalition of digestive diseases, and the miracles that medicine and God can provide.

I survived a liver transplant, and I hope I don't expire on the spot from fright.

Senator Proxmire, and members of the Committee on Health and Human Services: For me this is a return engagement, my third appearance before a congressional subcommittee, and I look forward to returning to these offices to tell my story year after year, as long as you continue to ask me, because I believe in myself, I believe in you, and I believe in the miracles that we can accomplish together.

In the words of Martin Luther King, I have been to the top of the mountain, and I have come home again. I have gone from a jaundiced, heartbroken, dying wife and mother, to an active, vital woman, sharing her life with two beautiful children, and a supportive and caring husband.

Gentlemen, I intend to waste none of my allotted 3 minutes telling you how sick I was because what is important is how well I am. I have gone from 14 years of chronic liver disease and a liver transplant, they are behind me. What is in front of me is the indisputable fact and painful knowledge that thousands of other Americans are dying daily of devastating, incurable liver diseases, while their terrified families cling to the promise of liver transplantation.

I say, hallelujah for my liver transplant. I have been returned from the dead. But promising everyone who suffers from liver disease a transplant is like holding out 100 liferafts on the shore to 50,000 people on the *Titanic*, dying 1,000 miles at sea. The real promise of life is research funding and education to provide the answers we so desperately seek to liver diseases that have steadily crept up to this Nation's fourth major killer of children, men, women in their most productive years.

I am sorry that Senator Weicker is not here because I am a native of his own State of Connecticut, and things are looking pretty darn good in Connecticut. In February of this year, tiny Marrisa Emple received a liver transplant at 12 weeks old, making her the youngest recipient of a liver transplant in the world. The birth of any child is a miracle, but for Jane and Jerry Emple, Marrisa's rebirth is truly a gift of God.

However, there is still no cure for the tyrosenemia that was choking off Marrisa's life, or the primary biliary cirrhosis that attacked mine for 14 years, or biliary atresia that affects so many youngsters, or sclerosing cholangitis, big words, and even bigger heartaches for those afflicted with these chronic, fatal liver diseases.

With your help, we can prevent the deaths of thousands. Senator Proxmire, without hope, life dies. You are the hope of thousands of chronically ill men, women, and children afflicted with liver diseases. I come before you in glow of my own good health asking you to use your vision, your compassion, and your role as leaders of our great Nation to help provide the funds to find the answers that can take countless mothers, fathers, and children who continue to suffer, as I once did, out of the shadow of death and into the sunshine of restored good health.

We heartily support the Coalition of Digestive Diseases' funding levels. May God continue to hold each of the worthy organizations that came before you this morning and all of us in the palm of His Hand.

Thank you.

PREPARED STATEMENT

Senator PROXMIRE. Bless your heart, Mrs. Willig. This is superlative testimony. We are in your debt. As I said, I regret that the chairman couldn't be here because he would be very proud of you. You look like $1 million.

Ms. WILLIG. I feel like $1 million, except that I can't stop twitching.

[The statement follows:]

STATEMENT OF JOYCE WILLIG

Senator Weicker, committee chairman—and native son of my own State of Connecticut—members of the Senate Subcommittee on Health and Human Services—and each of the representatives of the worthy organizations who have come before this distinguished committee to plead for understanding, funding, and support, I wish you all God speed. The task before each of us is difficult, demanding and desperately needed.

For me, this is an encore performance, my third appearance before a congressional subcommittee. Public speaking is not my forte. It is yours. And you do it well! But I look forward to returning to these offices to tell my story, year after year, as long as you continue to ask me. Because I believe in myself—I believe in you—and I believe in the medical miracles we can accomplish together.

In the words of Martin Luther King, I have been to the top of the mountain and I have come home again. I have gone from a jaundiced, heartbroken, dying wife and mother to an active, vital woman sharing her life with two beautiful children and a supportive, caring husband. I am reborn and loving every minute of it. Gentlemen, I intend to waste none of my allotted 3 minutes telling you how sick I was. Because what is important is that today I am healthy as a horse. My 14 years of chronic liver disease and a liver transplant are behind me.

What is in front of me is the indisputable fact and painful knowledge that thousands of other Americans are dying daily of devastating, incurable liver diseases—while their terrified families cling to the promise of liver transplantation. Hallelujah for my liver transplant. I have been returned from the dead. But promising everyone who suffers from liver disease a transplant is like holding out 100 liferafts on the shore—to 50,000 people who are riding the *Titanic* 1,000 miles at sea! The real promise is research funding and education to provide the answers we so desperately seek to diseases that have steadily crept up to this Nation's fourth major killer of children, men, and women in their most productive years.

As Senator Weicker may well be aware, things are looking pretty good in Connecticut. I watched tiny Marrisa Emple go from a jaundiced, pathetically swollen, dying infant to a smiling, gurgling, delightful little doll.

In February of this year, Marrisa received a liver transplant at Yale New Haven Hospital—making her, at 12 weeks old, the youngest recipient of a liver transplant in the world. The birth of any child is a miracle—but for Jane and Jerry Emple, Marrisa's rebirth is truly a gift of God.

However, there is still no cure for the tyrosinemia that was choking off Marissa's life—or the primary biliary cirrhosis that attacked mine—or biliary atresia that affects so many youngsters—or schlerosing cholangitis—big words and even bigger heartaches for those afflicted with these chronic, fatal liver diseases.

There are inroads. A new vaccine for hepatitis-B is helping hospital technicians and other professionals who come in contact with blood, body secretions, and contaminated needles—from contracting the dreaded virus. But these people must be educated to the importance of taking these drugs. A young lab technician and mother of four, died in New Haven recently because she had not taken the vaccine. Hers was a preventable death.

With your help, we can prevent the death of thousands of others.

Gentlemen, without hope life does. You are the hope of thousands of chronically ill men, women, and children afflicted with fatal liver diseases.

I stand before you in the sunshine of my own good health—asking you to use your wisdom, your compassion and your role as leaders of our great Nation—to help provide the funds that will find the answers—that can take those countless mothers, fathers, and children who suffer as I did—out of the shadow of death—and into the sunshine. May God hold all of us in the palm of his hand. Thank you.

The American Liver Foundation's funding recommendations for fiscal year 1986 are:

National Institute of Arthritis, Diabetes, Digestive, and Kidney Diseases, $638 million with $157 million allocated for digestive diseases and nutrition.

Conte Digestive Diseases Centers program, $12 million.

National Digestive Diseases Advisory Board, $350,000.

National Digestive Diseases Education and Information Clearinghouse, $500,000.

Digestive diseases epidemiology data system, $2 million.

STATEMENT OF PAYTON WEARY, M.D., WASHINGTON REPRESENTATIVE, COUNCIL ON GOVERNMENTAL LIAISON, AMERICAN ACADEMY OF DERMATOLOGY

Senator PROXMIRE. Our next witness is Dr. Payton Weary. Dr. Weary is the Washington representative of the Council on Government Liaison for the American Academy of Dermatology.

Dr. WEARY. Thank you, Senator Proxmire.

This is a tough act to follow. I would also say that I am the chairman of dermatology at the University of Virginia School of Medicine. Before I begin my testimony, let me just say that the Academy of Dermatology has this program for academic medical center for congressional health aides. We are very fortunate to have had Larry Patton in one of our early groups. I want you to know that Larry was one of the real leaders in the group that he was in, and you are very fortunate to have someone like Larry on the staff. We hope that it was very useful to Larry and thereby to you.

Senator PROXMIRE. Thank you very much. I will take that comment back to Mr. Patton. He will appreciate it.

Dr. WEARY. It was very, very nice to have him there.

Senator, we have submitted testimony to the committee. I have another copy of this here, and I would present you with a copy of the report on "Research Needs and Priorities" which was published this year. It is an update of the original report requested by the Congress some year ago, about 5 years ago. It outlines the advances that have taken place in the field of dermatology research. There have been extraordinary advances. It also stresses the opportunities available for future research.

[CLERK'S NOTE.—Report available in subcommittee files.]

Dr. WEARY. I encourage reading of this document. I have brought out some of the important points that we would make in the document in my testimony.

The Society of Investigative Dermatologists are presently in this city. There are a tremendous number of exciting research opportunities that they have reported at this very time.

I have in my testimony asked for support, and outlined our concerns about a number of institutes, six institutes, in fact, because dermatologic research spans a very large number of institutes. I will ask you to pay particular attention to that.

In particular, though, Senator, I would express our great concern about the funding of the National Institute for Occupational Safety and Health. This is, of course, not an institute of NIH, but it is an institute that has supported research in occupational skin disease, and occupational diseases of many types. I think that this institute has been a Cinderella institute, waiting by the fireside while all of its sisters are going to the ball. It is an institute that is very much underfunded. The funding for this institute goes down every year, not only in terms of constant dollars, but in terms of real dollars.

I think that this is not a healthy thing. If we look at the productivity of American industry, it is very much dependent upon having a productive and healthy work force. Anything that impairs the productivity of the work force in the United States, I think, is detrimental to the interests of the United States as it competes in the world markets.

We would urge that this institute be granted better support in the future.

Finally, I would just like to tell you one very important thing. This year, through the help of the Congress and the President, a proclamation was issued for a National Skin Cancer Prevention and Detection Week. We were very pleased at that, and I am very pleased to tell you that this year there will be 400 skin cancer clinics, or maybe more, held across the United States. There has already been a number that have been held in the major cities. I was talking last night with some of the people who have been holding these.

In the one in New York, for instance, they screened some 2,000 people and found about 18 malignant melanomas, which are the most serious type of skin cancer, and something in the neighborhood of 80 to 90 basal cell skin cancers. So there is a lot of skin cancer out there, Senator, and we think that our program of prevention and early detection will be very useful.

I think that it points out the need, also, for increased research support for skin cancer and many of the other diseases that afflict the skin.

PREPARED STATEMENT

With that, I will conclude my testimony and thank you.

[The statement follows:]

STATEMENT OF DR. PAYTON WEARY

Mr. Chairman, I am Peyton E. Weary, M.D., Professor and Chairman of the Department of Dermatology at the University of Virginia School of Medicine and Washington Representative from the Council on Governmental Liaison of the American Academy of Dermatology. I am also the current Vice-President of The Society for Investigative Dermatology. I am presenting this testimony on behalf of The American Academy of Dermatology, whose membership of over 6,500 represents the majority of American Dermatologists, and on behalf of The Society for Investigative Dermatology, the representative organization for the dermatologic biomedical research community.

I would begin my testimony by applauding the Congress for its efforts to assure that the intent of the Congress to increase the support for investigator-initiated research through the NIH is not undermined this year. We would also commend the efforts of the Prospective Payment Assessment Commission and particularly the work of Donald Young, M.D. who has been so successful in getting the Commission up to speed in a remarkably short period of time. We urge your continuing support for this important activity.

In my testimony last year, I noted that the updated analysis of research needs and priorities in dermatology, first released in November of 1979, and revised at the request of the Congress would be available later in the year. This report was published in November of 1984 and we are pleased to submit it to the subcommittee. We are pleased to report extraordinary advances in the acquisition of new knowledge about the causes and management of skin diseases in the five-year period since the initial report. We are proud of our research accomplishments and believe also that your subcommittee should share in this pride because the majority of this research has been supported by the National Institutes of Health from funds appropriated by this subcommittee. This document, thus, is a testimonial to the wisdom of the Congress in continuing its strong support for biomedical research.

I would like to briefly summarize some of the exciting new advances noted in the report and some of the data which indicates the importance of skin disease research.

1. Estimates of the burden of skin disease in the Unites States indicate that skin diseases account for 2% of the total national

health expenditures or 5.1 billion dollars and are estimated to generate an additional indirect loss to society of 1.7 billion dollars in terms of morbidity and mortality.

2. Psoriasis is one of the most common chronic skin diseases and is slowly yielding up its secrets. We now are able to identify a number of mediators of inflammation which may play major roles in the disordered metabolism of the skin in psoriasis and which will allow us to better target our therapy for this disease.

3. Various types of eczema have been studied. One of the more troublesome, atopic dermatitis, appears to demonstrate defects in the white cells in the skin using monoclonal antibody techniques which promise new understanding about the regulation of the skin's immune system. In contact dermatitis, which is one of the most common forms of eczema, the recognition of the importance of a cell in the skin called the Langerhans cell in the inducement of this disease has opened up new vistas which are most promising for our ability to effectively treat and possibly prevent such conditions as poison ivy dermatitis.

4. The use of the Vitamin A derivative drug, Accutane, has revolutionized the treatment of severe disfiguring acne. This drug also promises to be useful in a number of other conditions which have heretofore been notoriously resistant to treatment.

5. Skin cancer is still the most common type of cancer and continues to increase each year. This is a particular problem with respect to malignant melanoma, the most serious type of skin cancer. We are pleased that the Congress passed a joint resolution this year designating a National Skin Cancer Prevention and Detection Week. We are pleased to report that over 400 skin cancer detection and prevention clinics are scheduled to be held by dermatologists this year. We are on the threshold of many exciting new discoveries of important factors which result in the development of skin cancer and which will permit better methods of treatment. One of the exciting new fields is the study of the wart virus and its role, and the role of similar viruses, in causing human cancer.

6. The availability of the oral antiviral drug, Acyclovir, will allow us to treat recurrent herpes simplex infections effectively although as yet a cure for this disease is not available. Other infections such as those caused by fungal organisms are responding to a host of new effective agents introduced in the past five years.
7. Much work has been done in trying to better understand a large number of congenital diseases. One such disease, dystrophic epidermolysis bullosa is now much better understood, and I am sure you will hear more about this from other witnesses. We are also in the process of identifying basic disturbances in body chemistry which cause a large group of serious chronic disorders called ichthyosis. In no other area can the importance of basic science and molecular genetics be shown to contribute more to the understanding of disease than in this area of the many congenital skin diseases which cause so much life-long suffering.
8. There are a number of exciting new opportunities in such areas as aging of the skin, occupational and environmental skin disease, and prevention of skin disease outlined in this report. It is for the above reasons that we strongly advocate a continuation of the generous support of the Congress for dermatologic research so these many opportunities can be seized.

In regard to the NIH overall as well as specific institutes which support dermatologic research, we offer the following recommendations:

A. NATIONAL INSTITUTES OF HEALTH

We support the recommendations of the Ad Hoc Group for Medical Research Funding that the NIH be granted an appropriation for FY 1986 of 5.7 billion dollars to maintain current initiatives and provide for modest growth in important areas of research.

B. THE NATIONAL INSTITUTE OF ARTHRITIS, DIABETES AND DIGESTIVE AND KIDNEY DISEASES

We endorse the recommendation of the voluntary and professional associations in support of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases for a minimum funding level of $637,999,000 for FY 1986 (attachment). We would stress, however, that this should be a minimum level and hope that additional funds can be appropriated for the Arthritis, Musculoskeletal and Skin Disease Division to create specialized centers of research (SCCRS) which will permit an organized approach to interdisciplinary research among the component disciplines within this division.

C. THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

We note with dismay that the President's proposed budget once again calls for totally inadequate support for this distressed institute. We ask the Congress to acknowledge the importance of occupational disease in reducing the productivity of our industry and agriculture and thereby undermining the competitive position of America. We ask you to provide a substantial increase in the budget for this institute rather than the reduction called for by the administration.

D. THE NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

One only has to witness the ravages of a disease such as AIDS to become aware of the devastation of infectious diseases and inadequacies of the body's defense mechanism. This institute is still significantly underfunded in comparison to its broad mission and the potential promise of the research it supports for many diseases afflicting society. It well deserves your continuing support.

E. THE NATIONAL CANCER INSTITUTE

As noted earlier there are many new opportunities for research on skin cancer. The American Academy of Dermatology has embarked on a major campaign to detect and prevent skin cancer. It would thus seem particularly propitious to couple this effort with increased support for research in skin cancer with special emphasis on malignant melanoma.

F. THE NATIONAL INSTITUTE ON AGING

The generous support for this important institute should be continued. The importance of skin disease in the elderly should not be minimized since 40% of older individuals have a significant skin problem.

G. THE NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

Because environmental factors play a major role in skin disease we continue to have an active interest in strong support for this institute.

In summary, Mr. Chairman, we appreciate the continuing enlightened support which the Congress has granted the National Institutes of Health. We are pleased to report an exponential growth in important skin-related research and we hope you are as proud as we are of the advances in biomedical research supported by The National Institutes of Health.

FOR CONSIDERATION: POTENTIAL FUNDING LEVELS FOR FY 1986 FUNDING

1985 Appropriation (adjusted for management fund charges)		$540,165
1986 to Maintain "1985" Levels		
. Restore noncompeting research grants to full cost, and cover additional noncompeting commitments	+$30,477	
. Maintain same number of competing grants * (800 - priority 172, 34.5%) as in 1985 at full cost	+26,766	
. Full funding of current level of 44 research centers	+7,191	
. Maintain 1985 number (292) of research career awards and other research	+855	
. Maintain 1985 level of trainees (912)	+739	
. Provide for minimal allowance for increased costs of R & D contracts	+428	
. Restore cuts in intramural research and in research management and support	+4,513	
MAINTAIN "1985" LEVELS	+70,969	611,134
1986 Professional Judgement		
. Raise payline to 180 by funding 130 additional competing research grants	+17,124	
. Increase competing Physician Scientist Awards to the 1985 level of 12 individual and 6 institutional, and increase other research career awards to 250	+4,624	
. Provide necessary increases in the Diabetes Control and Complications Trial ($1 million) and in ongoing arthritis clinical research efforts ($1.2 million), and expand efforts in Digestive Diseases Data System and iron chelator development	+2,500	
. Provide for a modest enhancement of intramural research activities	+2,615	
	+26,863	637,997
Improved Funding Levels		
172 Priority score (34.5%) - 800 competing grants		
180 " " (40.1%) - 930 " "		
185 " " (42.3%) - 981 " "	+6,535	644,532
190 " " (44.3%) - 1,029 " "	+5,588	650,120
195 " " (46.5%) - 1,079 " "	+6,143	656,263
200 " " (48.4%) - 1,123 " "	+5,582	661,845

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* "competing grants" now include Small Business Innovative Research awards, which are estimated at 39 in 1985 and 55 in 1986.

Senator PROXMIRE. Thank you, sir. I understand that with an aging population, we can expect a greater incidence of skin cancer in the future.

Dr. WEARY. Very much so, Senator, that plus the increased amount of time that people spend outdoors, this is both recreationally and vocationally. So the incidence of skin cancer is greatly increased, and malignant melanoma has grown exponentially. This is of great concern to all of us because this is the most serious.

Senator PROXMIRE. Is dermatology the only field in which the funding has gone down in dollar terms? It must be one of the few.

Dr. WEARY. The funding in dermatology has been more or less plateaued at a fairly constant level. If you look in terms of constant dollars, it really has gone down, yes. We have been very concerned, Senator.

Senator PROXMIRE. You indicated that even in nominal dollars, funding for dermatology has not gone up.

Dr. WEARY. It has plateaued, it is quite a flat level, and we feel that increased support for dermatological research is very much worthwhile and very necessary.

Senator PROXMIRE. Thank you very, very much.

Dr. WEARY. Thank you, Senator.

Senator PROXMIRE. The chairman of the full committee has arrived to introduce the next witness.

STATEMENT OF ARLENE PESSAR, R.N., EXECUTIVE DIRECTOR, DYSTROPHIC EPIDERMOLYSIS BULLOSA RESEARCH ASSOCIATION [DEBRA]

ACCOMPANIED BY CAL LARSON, SPOKESPERSON, DEBRA

Senator HATFIELD. Senator Proxmire, I am happy at this time to invite some old friends to the table, to make a presentation. They are representing DEBRA, which is the organization that Arlene Pessar has given great leadership to in bringing focus to a great need in the area of medical research that has had very little attention over the years.

Last year, we were able to earmark about $750,000 for that research. I believe there are 12 grants out in that program, and we are hopeful that we can maintain that level of funding for the coming year.

Cal Larson, who is another old friend of mine, has been very influential in testifying before our committee in the past and elsewhere to bring, again, a focus to this need. He is one of the victims of this particular malady, which I am convinced we are going to find an answer to. The only problem we have is maintaining the level of resources, the funding for that search. I have committed myself to him and to others. I, for one, am willing to join on that battlefront. Senator Proxmire has been very keenly involved and interested in the medical research as well.

If I could just say also, I have noticed Terry Lierman here, who has been a very important part of this committee over many years. I am happy to see you here today, Terry.

However you wish to handle your testimony, your full statement will be printed in the record, then you can highlight it as you wish.

Ms. PESSAR. You have already done it for me.

Senator HATFIELD. I didn't mean to make the introduction longer than the testimony.

Ms. PESSAR. You have covered all of my major points.

Senator HATFIELD. We are happy to have you both here today.

Ms. PESSAR. I am Arlene Pessar, and this is Cal.

I am the founder and executive director of Distrophic Epidermolysis Bullosa Research Association, and I am also the mother of a 14-year-old son, Eric, who suffers from epidermolysis bullosa [EB].

As someone whose life has been dominated by this horrible disease, I want to thank you, Senator Hatfield, and Senator Proxmire, and the other members of the committee, for your outstanding support, compassion, and the leadership you have shown on behalf of EB patients and families across the country.

Up until a few years ago, only a handful of people ever heard about EB, but today many more legislators, due to the efforts of Cal, and the hard work of some other people, many more legislators, health scientists, and even patients themselves have become aware of EB and its tragic effects. Finally, today, we can face the future with hope and some peace of mind.

I would just like to take a few minutes today to share with you some of the exciting and wonderful things that are happening to increase the awareness generating interest in epidermolysis bullosa.

In November, DEBRA sponsored its first national conference and reception to commemorate the first national epidermolysis bullosa awareness week. We were indeed honored when Senator Hatfield was at our wonderful party, along with Representatives Gilman and Waxman. Over 300 other people attended this conference. It was really a moving and memorable experience for everyone.

Within this past year, the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases has prepared this one pamphlet on epidermolysis bullosa. The pamphlets describes the various types of EB, their inheritance patterns, and offers advice on patient care. This is the first Government publication on this disease.

The NIADDK is also preparing to support a national EB registry. When completed this registry should yield important epidemiologic and genetic information on the disease.

Just this last week, DEBRA's board of trustees approved to support a registry for prenatal diagnosis of inherited skin diseases. We are all very excited about this project and anticipate that the information obtained will provide an important service to physicians and families who suffer from a variety of genetic skin diseases. It will also have the added advantage of increasing the understanding of normal and abnormal skin development in the fetus.

On the research end, enormous progress is being made. In just the past few years, a great deal has been learned about basic biochemical and structural integrity of the skin. Using monochromal antibodies, scientists have been able to identify a defect in the skin of some individuals with EB. To capitalize on this advance, and in accordance with this committee's directive, the NIADDK published its second program announcement. I am delighted to report that more than 10 new grant applications have been submitted, and after undergoing peer review, many have received very good scores.

Because of the present situation regarding NIH funding, however, we really do not know how many of these scientifically meritorious grants will be funded.

In this respect, we are very appreciative of the efforts of the Congress, and urge you to continue everything in your power to reverse the cuts imposed by the Office of Management and Budget, and retain the levels as approved for NIH.

Regarding the appropriations for this year, we join with the hundreds of other voluntary and professional organizations concerned about NIADDK funding, and urge you to approve at least a minimum of $638 million for this institute.

In my testimony last year, I requested that an additional $2 million be provided over the next 3 years to support new basic research on EB and related skin diseases. Despite budgetary pressures, this committee recognized the desperate need and provided $750,000 for intensified research. We are fully aware of the difficult decisions you must make again, but we hope that you will continue to exercise your wise and caring leadership and provide a second additional $750,000. This is the only way to assure the continuity of the new and exciting activity that has been going on.

Senator Hatfield, Senator Proxmire, it has only been 4 short years since we first came to your committee and asked you for your help. You have responded very generously to our pleas. Finally, for the first time ever in history there is hope that scientific breakthroughs in EB will come. The time is ripe for achieving major gains into the causes, treatment, and even prevention of this killer disease. We think that it is within our reach as well. We urge you to let the momentum continue.

Thank you.

Senator HATFIELD. Cal, do you have some comments or words of wisdom for us?

Mr. LARSON. Just keep on trying.

Senator HATFIELD. We are happy to have you and your mother and father with us today.

PREPARED STATEMENTS

Ms. PESSAR. I would also like to submit a statement from Dr. Martin Carter, who is the president-elect of the Society of Investigative Dermatology. He has prepared a statement.

Senator HATFIELD. We will accept your statements for the record.

[The statements follow:]

STATEMENT OF ARLENE PESSAR

My name is Arlene Pessar. I am the founder and executive director of the Dystrophic Epidermolysis Bullosa Research Association of America (D.E.B.R.A.). My son, Eric suffers from a severe form of epidermolysis bullosa.

Epidermolysis bullosa (EB) is a group of inherited disorders in which the skin forms blisters after minimal injury or even simple pressure. Symptoms of the disease can resemble severe burns and can be very painful and debilitating. Mucous membranes of the mouth, esophagus, gastrointestinal tract, respiratory and urinary tracts, and eyes may be affected and lead to scarring, infection, malnutrition, growth retardation and premature death.

D.E.B.R.A. is the only national voluntary organization dedicated to the improvement in the quality of life for EB patients, and their families through research, education and patient services.

I would like to begin by thanking you for the honor of appearing before this committee again. As someone whose life has been dominated by this horrible disease, I want to thank all of you for the outstanding support, compassion and the leadership you have shown on behalf of EB patients and families across the country. Up until a few years ago only a handful of people heard about EB. Today, many more legislators, health professionals, scientists and even patients themselves, have become aware of EB and its tragic effects. And finally the tide is beginning to turn and we can face the future with hope and some peace of mind.

I would like to begin by sharing with you some of the wonderful and exciting events that are happening to increase the awareness and generate interest in EB.

In November, D.E.B.R.A. sponsored its first National Conference and Reception to commemorate the first NATIONAL EPIDERMOLYSIS BULLOSA AWARENESS WEEK. Over 300 people attended this historic event. Patients and family members traveled to Washington from all over the country to meet each other and learn about the newest developments in EB research and treatment. It was a moving and memorable experience for everyone who attended.

Within the past year, in collaboration with D.E.B.R.A., the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (NIADDK) has prepared an excellent pamphlet on EB. This illustrated pamphlet describes the various types of EB, inheritance patterns, offers advice on patient care (such as skin care and bandaging, prevention of infection and protection of the skin), and reviews current research relating to EB. We are now in the process of distributing this to patients, parents and health professionals.

The NIADDK is also in the process of preparing to support a national EB registry. When completed, this registry should yield important epidemiologic and genetic information, and also identify a list of potential patients who would be willing to participate in research studies.

On the research end, I am happy to report that progress is being made. New and talented scientists are being attracted to this area. In just the past few years, a great deal has been learned about the basic biochemical and structural integrity of the skin. Using monoclonal antibodies scientists have been able to identify a defect in the skin of some individuals with EB. To capitalize on this advance, and in accordance with this committee's directives to stimulate and expand research, the NIADDK published its second program announcement encouraging the submission of grant proposals. I am especially delighted to report that more than 10 new applications have been submitted and after undergoing peer review, many have received very good scores. Because of the time involved between allocation of funds, and the reviewing, approving and awarding of grants, at this time we do not know how many of these grants will be funded in 1985. In this respect, we are deeply concerned that the Administration's attempts to reduce the number of NIH grants could not only impede the future of all biomedical research, but could push EB "back into the closet".

We therefore join with the other voluntary health organizations and professional societies and support the recommendations of the coalition concerned about NIADDK funding and urge you to approve a funding level of, at least, $637 million in FY 1986 for this Institute. We also are appreciative of your efforts to reverse the cuts imposed by the Office of Management and Budget and retain the funding levels approved and signed into law by the President.

In my testimony last year, I requested that an additional $2 million be provided over the next three years to support new research on EB and related diseases. Despite budgetary pressures this committee recognized a desperate need and provided $750,000 for intensified research on EB. Once again we are fully aware of the difficult decisions this committee must make, but we hope you will continue to exercise your wise and caring leadership. The second year of special funding for EB of an additional $750,000 will assure continuation of all this new and exciting research activity.

Mr. Chairman, it has only been four short years since we first came before this committee and asked for your help.

And you have responded generously to our pleas. Finally for the first time in history there is strong hope that scientific breakthroughs will come. The time is ripe for achieving major gains into the causes, treatment and even prevention of this killer disease.

We urge you to let the momentum continue.

Thank you again for giving us this opportunity to express our views. I hope this committee looks favorably on our requests this year as you have in the past.

[From Science News, Vol. 127, Jan. 26, 1985]

TOUCH-ME-NOTS

By JOANNE SILBERNER

Ten years ago at Montefiore Hospital in New York, pediatric intern Lawrence Schachner was called in to treat a newborn boy with a peculiar problem. "I saw a baby with a massive number of blisters and skin erosions," he recalls. Efforts to help hurt the infant instead. "In trying to care for the baby I found that very little mechanical trauma [physical disturbance] added up to a whole lot of skin lesions, which made the baby vulnerable to infection."

Attempts to put in an intravenous line to supply much-needed extra nutrition resulted in more trauma to the skin, and more blistering, not only to the skin but also in the esophagus. "I was losing a situation I thought I should be winning," Schachner, now at the University of Miami, says.

The baby eventually died, a victim of epidermolysis bullosa (EB), a disease once called epidermolysis lethalis because it was thought to be fatal in all cases. In the 10 years since Schachner saw his first EB patient, great strides have been made in defining the biochemistry and genetics of the disease, which is inherited in many cases, and researchers believe this knowledge may eventually lead to a cure.

Today at least 18 different diseases — most of which can be survived with proper care — fall under the heading of EB. All of the diseases are marked by a lack of cohesion between or within the layers of the skin. In some cases the mucous membranes are also affected. "As our probes become more specific the number of syndromes [identified] will become even larger," predicted one EB researcher at a recent Washington, D.C., conference on the EB-linked diseases and their therapies. The conference was sponsored by DEBRA (Dystrophic Epidermolysis Bullosa Research Association), a Brooklyn-based group that provides assistance and advice to EB victims and their families and finances EB studies.

The effects of EB range from mild blistering on the hands and feet associated with hot weather to fatal blistering in major organ systems. Typical EB blisters resemble serious burns and have to be dressed several times a day. Many of the victims suffer frequent infections and rely on antibiotics.

Estimates of sufferers in the United States range from 10,000 to 50,000; a registry under consideration by the National Institutes of Health may soon give a better idea of the number of victims. The diseases, which strike across races and nationalities, in most cases become apparent at an early age.

The skin consists of two layers: the outer layer, or epidermis, and the inner layer, or dermis. The epidermis serves primarily as a protective covering, while the fibers and cells of the dermis are laced with blood vessels and nerves, and are embedded with hair follicles, sebaceous (oil) glands and sweat glands.

Some types of EB involve just the skin. Others also affect the nails, esophagus, respiratory tract, eyes, digestive system, urinary tract, even the enamel of the teeth. In one form, the ends of the fingers or toes fuse together, webbed in by scarred skin. The limb ends look like cocoons.

Children with EB, many of whom were in attendance at the meeting, are otherwise normal, but they have some great hurdles to face: overcoming the disgust of their peers and the public, and protecting their sensitive skin without becoming isolated from the world. Rochelle Eisenberg, an Australian social worker who has a son with EB, notes, "The child comes to associate human contact with pain. But they have a closer involvement with the family, because of the demanding nature of the illness."

The weak connection in the skin can occur within the dermis or epidermis, or between the two layers. Diagnosis is accomplished by rubbing the skin gently and taking a tissue sample of the blister that forms within a few minutes. In patients with less sensitive skin, suction is used to raise a blister.

Then the fresh blister biopsy is looked at with an electron microscope, or the newer technique of immunofluorescence. In immunofluorescence, antibodies to three skin components are added to the tissue. A second set of antibodies that will react with the first set and that have been saddled with fluorescent molecules is added. The result is checked in a microscope equipped with a light source capable of exciting the fluorescent molecules.

The blister's location in relation to the three antibodies is checked — if all three antibodies are at the base of the blister, then the EB is one of the types that occur within the epidermis. If they're at the roof, it is dystrophic — within the dermis. And if one is on top, with the others on the bottom, the patient has junctional (between skin layers) EB.

Within these three types of EB, some of the diseases are now known to be inherited in a recessive pattern, so that only children who inherit abnormal genes from both their mother and father will get the disease. Other forms are dominant, meaning only one gene is necessary. Still other cases arise from a first-time mutation, and some of these patients have an excess of immune system components in their skin.

While EB has been diagnosed prenatally by taking a skin biopsy from the fetus, the procedure is difficult and risky. Researchers are presently searching for something sloughed off into the amniotic fluid that marks either EB or its absence so that diagnosis could be accomplished with the more routine amniocentesis.

With the patterns of inheritance for the most part figured out, focus is now being switched to what is happening at the molecular level, with the long-term goal of putting a stop to it. "Identification of those abnormal genes that permit blistering will make antenatal diagnosis simpler," says Joseph McGuire of Yale University in New Haven, Conn. "The next step, the correction of the identified defect, is not so simple."

The key player in EB is believed to be collagen, a class of proteins that serve as the major structural component of the body. Collagen is not a simple system — there are many types, and each, noted one scientist at the conference, "is synthesized by different kinds of cells, and regulated by a variety of different factors."

Explains Robert Briggaman of the University of North Carolina in Chapel Hill, "Some of these [collagen] structures may not be made properly, or there may not be enough of them. Some of them may be prematurely broken down."

Research has zeroed in on anchoring fibrils — tiny structures stretching between the dermis and epidermis, believed to be made of collagen. In the past few years, Briggaman and others have isolated antibodies to the fibrils; those antibodies, along with an antibody against a particular form of collagen, are enabling a closer look at what is awry.

The cascade of enzymes that break down collagen is also being investigated; among them is chymase, an enzyme that activates collagenase, which destroys collagen. "This [chymase-initiated breakdown] is a natural process that goes on all the time in normal individuals," says Mark Eisenberg of the University of New South Wales in Australia. But in certain EB victims, he has found, the process is much more active.

"As yet we have no evidence that [an excess of] the enzyme is responsible for skin fragility," he says. If this becomes known, he observes, "then a whole host of pharmacological agents that act on cells that produce chymase will become useful in treating EB."

For the moment, though, treatment is strictly palliative — dressing the wounds, ensuring proper nutrition, treating infections and giving psychological support. There have been glimmers of hope. A couple of years ago a study indicated that retinoids (a class of chemicals that includes vitamin A) inhibit the activity of proteins that break down collagen, but results of a trial at Washington University in St. Louis weren't good. While retinoids decreased the number of skin lesions, all of the patients exhibited side effects, including dry skin and itching — serious problems in EB patients.

Researchers at the recent meeting were more hopeful about phenytoin (Dilantin), a drug presently marketed for use against epilepsy. The drug is known to inhibit the breakdown of collagen, and in initial trials it has been successful against recessive dystrophic EB. Researchers are attempting to recruit enough EB sufferers to evaluate it.

"Research is far ahead of treatment," notes Jo-David Fine of the University of Alabama at Birmingham, who has been working on monoclonal antibodies against skin components. But he is hopeful. "As we learn more biology and immunology about EB, that information will generate clever ideas of how to exploit drugs in treatment."

Observes Briggaman, "What needs to be done is to get into the way in which the genes are working. ... We're pretty well clear on the structural defects, and we're starting to understand the biochemistry.

"We're at the end of the beginning," he says. "But there's a long way to go yet." ☐

Statement of Dr. Martin Carter, Professor and Senior Physician, Laboratory for Investigative Dermatology, Rockefeller University

My name is D. Martin Carter. I am Professor and Senior Physician at The Rockefeller University in New York City. I am also a member of the Health Advisory Board of D.E.B.R.A. and am pleased to have this opportunity to discuss with you my perceptions of the importance of epidermolysis bullosa and the need for research support.

Genetic diseases are costly to the public. Enormous numbers of dollars are expended by society in providing a lifetime of care for persons with incapacitating heritable skin diseases. It is not widely appreciated that many of the most common skin diseases are also costly to treat and are caused in part by unknown heritable factors. The study of dermatologic genetics continues to advance at a rapid rate, and recent progress has been substantial. The field is squarely in the mainstream of modern biomedical science, and the continued refinement of genetic principles and molecular biologic techniques is responsible for much current excitement among medical researchers. Research into the causes of rare, heritable skin diseases deserves attention for many reasons besides those related to the burden of cost.

Epidermolysis bullosa (EB) is a good example of the principles and new technologic advances outlined above. The disorder is rare, occurring with a frequency of one in 50,000 births, but morbidity and mortality rates are high. Marked clinical heterogeneity ranges from untreatable, extreme, fatal blistering in the newborn to mild blistering only when skin is stressed by excessive pressure (1,2). In some forms of the disease there is clear genetic linkage to another rare congenital abnormality, pyloric atresia. In the severe, dystrophic forms affected children blister easily at mild trauma to the skin and eventually develop mutilated, scarred extremities. Esophageal involvement may interfere with swallowing, and anemia and growth-stunting are probably related to nutritional losses. Eventually patients may succumb to overwhelming skin infections or develop aggressive skin cancers in scarred sites. The medical costs per patient are enormous.

The original descriptions of EB defined four basic types of disease: simplex, autosomal dominant; lethalis, automosomal recessive; and dystrophic in two forms, autosomal dominant and recessive. A new awareness of genetic heterogeneity underlying the mechanisms of disease has broadened the classification to at least 10 types (2). With a profusion of new cases, some of which have features unique to an individual or a family, the inheritance patterns are not as clear-cut as had been presumed. What was considered a single disease is really a group of disorders sharing common genetic defects in and around the basement membrane of the skin. In fact, from study of these rare cases, a great deal has been learned about the basic biochemical and structural integrity of the epidermis and dermis; about where the various components of the skin are synthesized; about how the components of the skin are held together; and how wounds heal.

Electron microscopy has been the mainstay in the diagnosis of EB, and for many cases it can definitively describe the type and presumably the inheritance of the disorder. More recently techniques of immunohistochemistry have been applied to improve the identification, lower the cost, and shorten the time required to establish an accurate diagnosis (3). Fluorescence-labeled antibodies have been developed that can define normal components of the basement membrane zone of the skin, thereby identifying the lamina lucida, lamina densa, type IV collagen, bullous pemphigoid antigen, and anchoring fibrils. Use of these tagged antibodies on affected skin allows direct visualization of the level of blistering. A newly recognized antigenic component of the basement membrane has been associated with epidermolysis bullosa acquisita (5).

Current studies are beginning to define an underlying abnormality in a specific dermal enzyme, collagenase, in recessive dystrophic EB. The principles of heterogeneity are again reflected at the molecular level, because not only are mutants formed by an abnormal enzyme but also some have an abnormality in the regulation of enzyme production. An interesting outcome of this basic research is the observation that phenytoin (diphenylhydantoin [Dilantin]) has an ameliorative effect in vitro and seems to be clinically useful in reducing blistering (4).

I am responsible for a national, multi-center, double-blind, crossover study to test the efficacy of phenytoin in 100 persons with recessive dystrophic EB. This study is partially supported by a grant from the Orphan Products Division of the FDA. It has been undertaken with the help of the

American Academy of Dermatology and D.E.B.R.A. without whom it would be impossible. At the Rockefeller University Hospital we now care for more than 50 persons with EB, 13 of whom have entered the study. Programs such as this help to focus attention on both medical and scientific challenges of individuals with the disease. We need to establish a national EB registry. A means must be found to continue the work of specialized centers such as ours in New York. One mechanism is that of the General Clinical Research Centers that exist across the country.

EB is one of the disorders most amenable to prenatal diagnosis. The advancements in fetoscopy and antenatal skin biopsy, combined with electron microscopy and immunohistochemistry, have been applied to this disorder and will be to a greater degree.

For the future we need to understand the molecular defect in most of the types of EB. Abnormal structural components have been defined by using monoclonal antibodies to anchoring fibrils or to a noncollagenous component of the lamina densa.

As exemplified by the application of phenytoin to alter collagenase, new therapeutic modalities must be based on better understanding of mechanisms of disease. In vitro trials of other pharmacologic agents and confirmations of preliminary clinical trials must be performed. Research on mechanisms of secondary effects of the disease, such as anemia and growth retardation, may contribute to therapies for these secondary disorders.

The combined needs for research and care in epidermolysis bullosa were emphasized last year by Dr. Eugene Bauer in his testimony. I heartily endorse his recommendations, and those of Ms. Arlene Pessar, that specific funds be made available for clinical research in this disease. In addition to a requirement for dollars to fund investigator-initiated research proposals, dollars are needed for patient-oriented research proposals of the sort I describe.

Parents need 1) advice on "nursing" care of their children; 2) practical advice on available social resources; 3) psychological support for the anguish involved in caring for such ill children; 4) financial aid. Some of this can be offered by multidisciplinary centers which would search for the cause and treatment of this dreadful disease while attending to the medical needs of the patient and general EB-related needs of the family.

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Senator HATFIELD. Senator Proxmire, do you have any questions?

Senator PROXMIRE. I would just like to commend both of you, Ms. Pessar and Cal, for your very, very touching and moving presentation. You have opened my eyes. I wasn't aware of this problem. I think the pamphlet on EB is superlative. I have just had a chance to glance at it.

Ms. PESSAR. There are many, many families in the State of Wisconsin with this disease.

Senator PROXMIRE. Your request is very modest.

Senator HATFIELD. It is amazing that in all my life, I had never known anyone with this problem.

Senator PROXMIRE. I can see that it is the kind of thing that can happen. It is a genetic disease so the chances of a child being born with it are 25 percent in some cases and 50 percent in others.

Ms. PESSAR. I am a classic example. I am a carrier, and never knew it until my son was born, the same with the Larsons.

Senator HATFIELD. I discovered, out of my association with Cal and Arlene, when they had this national conference, there were some folks from Oregon who were here. I didn't know that, you know.

I wonder if within your association, it might not be a good idea to suggest in all those States where there are people suffering from this disease, to make a personal appointment, to have a personal visit with their Senator and their Congressman as another way of broadening the scope of knowledge and information.

Senator PROXMIRE. That is an excellent idea. You have just told me that there are a number of people in Wisconsin with EB, and none of them have ever written me, as far as I know. I have certainly never had a chance to talk to them.

Ms. PESSAR. It is a difficult situation. Most of these people are just devastated emotionally and financial. It is really a closet disease.

Senator PROXMIRE. I think that is right. I think they are reluctant to come forward.

Ms. PESSAR. They are reluctant.

Senator PROXMIRE. If you could encourage them to come forward on the basis of what the chairman has told you, I think it would be productive.

Senator HATFIELD. Now you have broken through. We have a national conference. We have a national association. We have a publication. So we have a base now for people to come out of the closet, or whatever it is that they have to do, psychologically or otherwise, to initiate those contacts, and broaden that information.

Ms. PESSAR. We will have to plan my march on Washington. That is a good idea.

ADDITIONAL PREPARED STATEMENTS

Senator HATFIELD. Senator Proxmire, do you have anything further?

Senator PROXMIRE. No; Mr. Chairman. At this point I would like to include other statements for the record on appropriations for the National Institute of Arthritis, Diabetes, Digestive, and Kidney Diseases.

[The statements follow:]

STATEMENT OF DR. DONALD O'KIEFFE, CHAIRMAN, LEGISLATIVE COMMITTEE, AMERICAN SOCIETY FOR GASTROINTESTINAL ENDOSCOPY

I am Donald O'Kieffe, M.D., a gastroenterologist in the private practice of medicine in the Washington, D. C. area, and Chairman of the Legislative Committee of the American Society for Gastrointestinal Endoscopy (ASGE).

ASGE is made up of more than 3,000 gastroenterologists and surgeons specializing in the use of fiberoptic endoscopes for the diagnosis and treatment of intestinal diseases.

Over the past few years, this committee and the Congress have been extraordinarily supportive of research in digestive diseases.

Over the last two years this subcommittee has agreed with your counterpart House subcommittee in the need for and the development of digestive diseases centers. Although others of my colleagues will be discussing these centers in detail, the ASGE would like this committee to know that such centers have our full and unqualified support, and feel that the centers will provide a major resource for advances in the field of digestive diseases research in the near future.

We also, along with our colleagues, deeply appreciate your concern about the continuation of the Digestive Diseases Advisory Board, as well as the Education and Information Clearinghouse, and lastly, the Data Program, of which I will speak more shortly.

Mr. Chairman, the ASGE commends you and your colleagues for your very strong support of the FY 1985 level of 6,500 new grants for the NIH. We know that the Office of Management and Budget has attempted to decrease that number, and we fully appreciate the strong stand that you have taken, including your letter to the GAO, and are very pleased to see that its reply has indicated that multiyear funding of grants is, under the current authorization and appropriations statutes, illegal.

In terms of funding NIH and NIADDK for fiscal year 1986, ASGE, along with its sister organizations, supports an NIH budget of $5.7 billion and NIADDK funding at a level of $637,997,000. We feel that this level of funding is necessary to keep biomedical research moving forward and, as we have emphasized in the past, dollars expended today in this endeavor should result in large economic savings in the future, not to mention the impact on quality of life.

Now, Mr. Chairman, I would like to site a specific example of how research at the NIH can translate directly into improved health, decreased suffering and a lowering of health care costs in the future. I am referring specifically to cancer of the colon.

Current statistics indicate that in 1986, there will be 120,000 new cases of cancer of the colon and 60,000 deaths from this important disease, which ranks second as a cancer killer in the United States.

We have come to learn, over the past decade, that nearly all colon cancers begin in benign polyps and, if these polyps are removed, no cancer can develop.

In other words, cancer of the colon is actually preventable.

Our concern today is to discover individuals harboring colon polyps and then, by a relatively simple (out-patient) procedure, remove them.

The problem that we are having identifying these individuals is that polyps are totally silent until they are relatively large and, since the incidence of cancer increases with the size of the polyp, we may have missed the opportunity to prevent the cancer by the time symptoms occur.

What we need is a simple test to tell us which individuals have polyps. Our current mass screening test is a stool check for microscopic, or occult, blood; but we are finding that this has been helpful only about 50% of the time and is non-specific for colon lesions.

NIH is currently carrying out research on a new stool test which could revolutionize our ability to identify individuals with colon polyps or a propensity to develop them. This research could not have been conceived, or carried out, without the availability of fiberoptic technology and the use of a colonoscope, an instrument which has been talked about before to this committee. ASGE is proud to be assisting NIH in this endeavor.

Simply put, monoclonal antibodies to an antigen found in colon tumors is being studied. Using polyps, colon tissue adjacent to polyps and other colon specimens supplied by colonoscopic techniques, it is beginning to appear that there is a specific antibody which can be detected in the stools of patients with colon polyps or a propensity to polyp formation. If this concept holds, an economical and specific mass screening test could be devised whereby analyzing a stool specimen for the presence of this antibody, individuals at high risk could be selected out for further studies.

Reducing the numbers of any cancer is a laudable goal; however, I would like to emphasize some of the economic aspects of this issue. Once the cancer has spread beyond the confines of the polyp in which it began, abdominal surgery is needed. Later it can be anticipated that additional treatments will be necessary, including chemotherapy and possibly more surgery and that the ultimate outcome might well be premature death.

Because of the numbers of Americans with cancer of the colon, the dollars expended on health care, coupled with the loss of income as a result of the medical disability, amounts to a huge financial burden for society.

In short, Mr. Chairman, when you and your committee sit down to make hard decisions on the allocation of revenues in this difficult economic climate, it is somehow easy to consider biomedical research in the abstract -- something that is good, but vague. I think it is important to periodically be aware of some of the specific research goals and the social and financial consequences of that research.

Now, Mr. Chairman, I would like to turn your attention to another area of considerable opportunity for digestive diseases research. There is now currently, within the NIADDK, a program which will permit data collection on various digestive diseases.

The ASGE is hopeful that in its bill report language, this committee will stress the remarkable opportunities now available for the development of a data base in endoscopy, and urge the NIADDK to move forward vigorously in its application.

Let me now spell out in some detail the opportunities for the development of an excellent data base for endoscopy. This is an example of the close alliance that has been developed between the NIADDK digestive diseases program and the American Society for Gastrointestinal Endoscopy.

DATA BASE FOR ENDOSCOPY

There are a number of major gastrointestinal problems for which the epidemiological data is quite limited. New instruments, imaging techniques, and computers have increased our opportunity to obtain accurate epidemiological data.

The endoscope provides information based on direct observation of the mucosa and its lesions, inflammatory or neoplastic. Endoscopic biopsies provide information based on pathological studies of the tissues. Thus, endoscopic findings are often the critical element in the diagnosis of gastrointestinal mucosal lesions and a data base of such findings would be useful for clinical epidemiological studies. If we hope to increase our knowledge of upper digestive tract diseases, one approach is to study endoscopic information. The potential for such studies has been greatly increased by developments in the use of the computer. With the computer, we can gather large amounts of data and analyze this data in a variety of sophisticated ways.

Reasons for Developing a Data Base

There are several reasons for developing a data base of endoscopic observations now.

1. The American Society for Gastrointestinal Endoscopy (ASGE) is interested in developing a computer program for endoscopy, and in performing such studies. The Society has already begun work and is cooperating with NIH.

2. Experience, knowledge, and technology for the development of data bases has been increasing; there are now available sophisticated yet inexpensive computers and ancillary equipment, new statistical approaches for managing and analyzing data bases, and an enlarging group of experts who can use this technology.

3. New techniques for using the computer specifically to record endoscopic findings rapidly and accurately now appear possible.

The American Society for Gastrointestinal Endoscopy is working on a computer program to record data from endoscopic examinations. The ASGE is also interested in combining data from a number of observers in order to obtain large numbers of cases for study of a specific disorder. ASGE is also working on a standard terminology dictionary and a standardized process for recording observations.

For example, a diagram of a stomach or colon will be supplied on a computer screen and the physician can indicate the site of a lesion by touching the screen at the site with a light pen. Describing the site with words would be difficult, time consuming, and might be less precise.

We also plan to explore digital images, i.e., pictures in which each small dot, such as the dot in a television picture, is identified by a number. Such pictures can be analyzed mathematically as well as simply being studied visually. For example, the intensity of a color can be measured numerically.

One of the problems that the data system will address is the correspondence between visual and pathological findings. Therefore, it will be necessary to complement the visual observations on endoscopy of each individual patient with findings on pathological examination of his or her biopsies. Here again standardization of terms, definitions, protocols for preparation of specimens and their description by the pathologist, and criteria for diagnosis will have to be developed. From previous experience with one problem, colon hyperplasia, this may take as long as two years. But once such a protocol has been developed it will have application to many subsequent studies.

SUMMARY

Once again, Mr. Chairman, we are deeply grateful to you for all that you have done for all of biomedical research.

I would be pleased to answer any questions that you may have.

STATEMENT OF ANN KONE, EXECUTIVE DIRECTOR, PAGET'S DISEASE FOUNDATION

As Executive Director of the Paget's Disease Foundation, I would like to add to the testimony you have heard regarding increased appropriations for the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) and for the National Institutes of Health (NIH) as a whole.

The Foundation is a small voluntary organization dedicated to helping the sufferers of Paget's disease of bone. It is estimated that around four percent of people over forty years of age--increasing to over ten percent over ninety years of age--are afflicted with this disorder. Of the potential two or three million Americans who have Paget's disease, rough statistics show that only around 200,000 have been diagnosed or treated. The Foundation has worked in its six years of existence to reach these patients and more. Clearly, there is still a tremendous amount of work to be done--work which needs the help of the NIH.

Paget's disease of bone is a complex, crippling, progressive disease in which the bone regeneration process goes awry. The resulting symptoms include bone pain, the sensation of heat in the affected areas of the body, deafness, and other neurological complications when the skull is involved. Bone deformities often cause osteoarthritis to develop in the adjacent joints, most commonly the hip and the knee. It is postulated by researchers that Beethoven suffered from Paget's disease--that it was the source of his deafness and prominent brow.

In 1984 the NIADDK issued a report entitled "Evaluation of the Musculoskeletal Diseases Program", NIADDK-NIH (Pub. No. 84-109). According to health statistics cited in the report, musculoskeletal disorders lead all other categories--including heart disease--in disabling the American work force. Daily, we receive letters from senior citizens who are suffering constant pain. One wrote:

> "I have Paget's disease for quite a few years now. It's in my right arm, right leg, knee, spine, right hip. I have so much pain So I'm writing to see if there's any new medication. I have so much pain and so long I cry."

Another wrote:

> "My condition from Paget's disease has progressed to the point that I have no 'hip joints' and barely walk using 2 canes or a walker. I have minimum muscle strength in my legs (thighs) although pain-wise I am on a plateau. [My wife] is legally blind so our move to a Retirement Home where we can get assisted care--when needed--seemed the wise thing to do."

Often the disease is misdiagnosed until it has progressed very far. Then the patient has difficulty finding a physician with enough familiarity with the disease to manage it properly. An indication of the problem can be illustrated by the response the Foundation received to some publicity last June. A small letter was printed in the newsletter of the American Association of Retired Persons which offered a free brochure on Paget's to anyone who wrote the Foundation. Over 14,000 people contacted us as a result, and we are still receiving letters from AARP members!

Some treatments have been developed in the past twenty years. They appear to be somewhat effective in suppressing the symptoms and possibly slowing down progression of the disease. But the evidence is not all in yet. And many patients become resistent to these drug therapies or suffer uncomfortable side effects.

What is being done today, and what can be done in the future? First of all, the fact that any drug therapies at all exist is largely through NIH sponsored research. Their long-term effects are being studied in Clinical Research Centers underwritten by the NIH. Basic bone research is leading to a better understanding of how bone is made, and thus to a better understanding of the diseases of bone.

Most exciting to members of the Paget's Disease Foundation are two NIH projects for 1985: one is the on-going study of the cause of the disease by Drs. Barbara Mills and Frederick Singer at the University of Southern California. These two researchers have isolated evidence that a slow-acting virus--similar to that which causes encephalitis after measles infection--may be the source of Paget's disease. If in the next few years they are able to isolate a virus, then treatment and possible immunization shots would provide a much brighter picture for Paget's patients.

The second project is a Paget's Disease Workshop to be held in Bethesda in September of this year. A small group of internationally-renowned participants have been invited to "brain-storm" for two days on a variety of approaches to understanding Paget's disease. An emphasis will be on the basic characteristics and functions of bone cells. It is hoped that the ensuing discussion will stimulate other avenues of research for the prevention and treatment of Paget's disease.

The symposium will be the result of a collaboration of planning and financing between the NIADDK and the Paget's Disease Foundation. This collaboration is one further example of the coordinated efforts between the NIH and voluntary organizations to improve the quality of life for disease sufferers. For example, in the past three years, the Paget's Disease Foundation and the NIADDK have worked together to produce the only lay literature available on Paget's disease. The pamphlet "Understanding Paget's Disease" was first printed in an edition of 40,000 copies in mid-1982.

Together, we have mounted an extensive public outreach campaign to distribute this information to the Paget's patient. (And many physicians and other health professionals have requested it as well). This month the brochure was reprinted in a second edition of over 50,000 copies. The Foundation did the work and underwrote the cost of distributing 20,000 copies of the first edition, as well as printing an extra 15,000 copies to last until the second printing was done. In a sense, our pooled resources have worked similar to a matching fund program: Without the resources of the NIH, it would have taken the Foundation several more years to produce such a booklet. Without the help of the Foundation's more personalized attention, the NIH publication would not have reached the hands of as many Paget's patients as efficiently.

This year the Paget's Disease Foundation is planning to expand its programs to encompass other metabolic bone diseases and to begin funding research for the first time. But our resources are tiny compared to those of the NIADDK. It will take some years before the Foundation is able to fully fund even one research project.

The Paget's Disease Foundation is therefore joining other voluntary and professional associations in support of the National Institutes of Arthritis, Diabetes, and Digestive and Kidney Diseases in asking for adequate funding for the Institute and all of the National Institutes of Health. We urgently request Congress to at the least maintain funding levels for 6,500 research grants annually. Any lesser amount jeopardizes the one research project on Paget's disease of bone currently being funded. It would also greatly diminish the possibilities for stimulating new research approaches which we hope this year's symposium will generate.

A further result of reduced funding would diminish the teamwork efforts in public and professional education which the NIADDK and the Foundation have nutured together. And finally, bone clinics across the country working with grants under the General Clinical Research Center program of the Division of Research Resources will not be as able to work to improve therapies for the chronic, debilitating bone ailments of our growing population of senior citizens.

The Paget's Disease Foundation is most appreciative for the Congressional support that the National Institutes of Health have received in past years. Please don't let us--or the rest of your constituents--down now.

SUBCOMMITTEE RECESS

Senator HATFIELD. We will stand in recess subject to the call of the Chair.

[Whereupon, at 12:25 p.m., Thursday, May 2, the subcommittee was recessed, to reconvene at the call of the Chair.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

TUESDAY, MAY 7, 1985

U.S. Senate,
Subcommittee of the Committee on Appropriations,
Washington, DC.

The subcommittee met at 9:30 a.m., in room SD–116, Dirksen Senate Office Building, Hon. Lowell P. Weicker, Jr. (chairman) presiding.

Present: Senators Weicker, Specter, Proxmire, Hollings, and Inouye.

Also present: Senator D'Amato.

NONDEPARTMENTAL WITNESSES

National Institute of Neurological and Communicative Disorders and Stroke

STATEMENT OF JAMES ROOSEVELT, PRESIDENT, NATIONAL COMMITTEE FOR RESEARCH IN NEUROLOGICAL AND COMMUNICATIVE DISORDERS

ACCOMPANIED BY DR. STANLEY VAN-DEN NOORT, CHAIRMAN OF THE BOARD, NATIONAL COMMITTEE FOR RESEARCH IN NEUROLOGICAL AND COMMUNICATIVE DISORDERS

OPENING REMARKS

Senator Weicker. The subcommittee will come to order.

This morning we will be hearing first from public witnesses on the National Institute of Neurological and Communicative Disorders and Stroke, followed by public witnesses for the National Institute of Allergy and Infectious Diseases, National Institute of Child Health and Human Development, National Eye Institute, National Institute on Aging, Research Resources, and the National Institutes of Health.

Again I would ask everybody to please follow the pattern, when the lights are green, yellow, and red. That is not so much as an accommodation to the chairman as an accommodation to your fellow witnesses.

Our first witness this morning will be Congressman James Roosevelt, president of the National Committee for Research in Neurological and Communicative Disorders.

Congressman, always good to have you.

Mr. ROOSEVELT. May I have Dr. Van-den Noort sit with me, sir?

Senator WEICKER. Fine. Wonderful.

Mr. ROOSEVELT. Mr. Chairman and members of the committee, I am delighted and very honored to be able to come back and be with you again. My appearance today is on behalf, as you have said, the neurological and communicative disorders community.

As the NCR president, I have had the opportunity to witness significantly increased enthusiasm over research developments in neurology and related areas.

The research applications coming into NINCDS are the most encouraging in history. Evidenced by the "Tracor-Jitco" report's findings, the momentum created by your knowledgeable and sensitive appropriations funding of NINCDS must continue if we are to unlock the myriad of secrets of the brain. So much progress already has been made.

NCR's Citizens Budget Committee, composed of some of the country's leading research scientists, met in New York City last month, Mr. Chairman, to develop a proposed level of funding that we would like to see you and your committee appropriate for the fiscal year 1986 funding of NINCDS. At that meeting much discussion was had over the implications of our asking for a very substantial increase in biomedical funding in light of the severe budget deficit facing our Nation.

The conclusion reached, and I would like to communicate it to you today, is that based on the findings of the "Tracor-Jitco" report team as well as NCR's research experts, extremely promising neurological and communicative disorders research can be funded in the amount of $737 million in the coming fiscal year. However, Mr. Chairman, we have to be realists, too. We recognize the problems which your committee will have in appropriating these amounts of funds in fiscal 1986. But we urge you to again substantially increase funding for NINCDS in order that the momentum which is underway will not stop and, therefore, be really a tragedy because it might have to be done all over again.

Mr. Chairman, if I may at this point ask Dr. Stanley Van-den Noort, chairman of the board of NCR, to speak, who can be much more technical than I can in this area.

Senator WEICKER. Thank you.

Dr. VAN-DEN NOORT. Mr. Chairman, I will be very brief.

It is an honor to be here. We are deeply grateful for the support that you have provided to neurological research in the past and feel confident of your future support.

A few examples. The diseases of the nervous system have been slow to respond to the scientific advances of the last century in large part due to our difficulties in gaining access to information of an organ in a box. But modern techniques of imaging with advances in electrodiagnosis and a growing array of biochemical and immunological probes have given us information that we could only dream about 15 years ago.

As a consequence, we have made advances in treatment at a remarkable pace. Victims of postinfectious polyneuritis are leaving the hospital nearly 1 month earlier than was the case only 2 years ago. At long last forms of multiple sclerosis are responding to treatment, and the mortality and morbidity of stroke have decreased markedly.

However, we face serious difficulties with Alzheimer disease and aging and we need to make advances. A 60-year-old with Alzheimer is often a substantial loss to his own organization before the disease is recognized, and the cost of replacing his experience and of taking care of this person could get into very large sums prior to the person's eventual demise.

The science developed to solve these problems is synergistic to the overall advances in high technology upon which the future of our economy and national security depend. Industry and the military are demonstrating increasing interest in neurological research. We have the best medical science in the world. We need to maintain that position and export its products.

We are deeply grateful to your committee for its support.

Senator WEICKER. I thank you both very much for your testimony. As you know, we are in the process of negotiating with the administration on the number of grants that NIH is going to be capable of handing out.

In addition, I think that insofar as funding is concerned, and you made the point, both of you, that these are investments in terms of return in the future. It goes both ways. If the investment is made, the return will be made there. If the investment is not made, we will have a dry spell out there.

You know this better than anybody else, Congressman. You sat in the same chair here in the sense of establishing things in the outyears. That really is what we are talking about here.

Mr. ROOSEVELT. Thank you, Senator. We are very sincere. We admire your leadership and the way you have stood up and fought for what your own experience has told you is the right thing to do. We certainly want to thank you.

Senator WEICKER. When I see you looking as good and healthy as you do, I think maybe I ought to get out of this chair. [Laughter.]

Mr. ROOSEVELT. Thank you very much.

STATEMENT OF J. ALFRED RIDER, M.D., PH.D., CHILDREN'S BRAIN DISEASES FOUNDATION

Senator WEICKER. J. Alfred Rider of the Children's Brain Diseases Foundation.

Dr. RIDER. It is always a pleasure to get the privilege to testify before your committee, Senator. We have always been very grateful.

The Children's Brain Diseases Foundation was started in 1968, with its first goal to discover the cause and cure for Batten's disease. We have had a lot of progression over the years but have still not arrived at our goal.

Batten's disease is a neurological disorder which may have an incidence as high as 1 in 12,500 births, similar to other genetic disorders. It is probably the most common type of storage disease in children. It manifests itself in previously normal children at the approximate ages of 4 to 8 and is characterized by a slow progression of clumsiness, stumbling and failure of vision, seizures, changes in personality, and dropping of scholastic grades.

The disease eventually leaves them totally disabled and unable to care for themselves and usually ends in death in the late teens or twenties and rarely into the thirties. The cost of taking care of one of these children through their lifetime may run well over $1 million.

The changes which occur in the brain in these children are quite similar to many of the changes in the aging person. Thus, effective treatment for Batten's disease may also allow us to alter the aging process of senility in all humans.

Batten's disease is the only neurological disorder for which animal models are available—dogs and sheep—a specific strain of dogs and a specific strain of sheep, which have a similar disease. They can be used to perfect diagnostic tests and to develop treatment and to better elucidate the pathophysiology of the disease, assist with genetic counseling, and evaluate therapy.

Additional funds are necessary to further the research in this important disease. The basic cause of the disease is now pretty well shown we think to be due to a defect in the peroxidase enzyme system in the brain. Research must be directed toward obtaining further evidence of this and initiate treatment with agents designed to block the accumulation of peroxidase or enhance its degradation.

We have always supported the budget presented by the National Institute of Neurological and Communicative Disorders and Stroke. We were very pleased that the committee approved an increase from $335,197,000 in 1984 to $401,403,000 in 1985, an increase of $66,206,000. However, in spite of wording in the 1985 appropriations bill—namely, "The Committee expects the Institute to continue the research effort on Batten's disease and related areas within the limits of high quality research available"—very little money has been spent by the National Institute of Neurological and Communicative Disorders and Stroke in the past 7 years, and no applications—and I must stress that—no applications were funded for 1985.

We feel that this gross discrepancy must be remedied and urge the committee to use the following language in the appropriation bill for 1986:

> The Committee is concerned upon learning that in spite of last year's recommendation requesting research on Batten's disease that no research is being funded in 1985. Therefore, it requests that the National Institute of Neurological and Communicative Disorders and Stroke actively solicit applications for grants of quality for Batten's disease and to fund up to $1,000,000 for research on Batten's disease.

I have talked to Dr. Goldstein of the Institute and he said he would not be adverse to language such as that. He said he would, with some stimulus, actively go out and solicit grants. I think if we are not getting quality research, and that is always debatable—good research is what I do; bad research is what you do. But I think with a little stimulus we can solve this problem, and if funding is provided, the chance of developing a specific treatment for the future appears to be very good. If moneys are not provided, then these efforts may come to a halt.

Thank you very much.

Senator WEICKER. Thank you very much. I fully appreciate your desire to see emphasis placed on research in the area of Batten's disease. I have no problem with report language or bill language requesting that NIH actively solicit proposals.

I have to say to you, and I think you would really agree with me, Doctor, as would most of your colleagues, I don't think I want to get this committee in the business of deciding what grants are going to go and which ones aren't.

Dr. RIDER. No; that is correct. But they can solicit.

Senator WEICKER. As far as getting out there and soliciting, that is something else. Then, quite frankly, the decisions should be made by people better qualified than I as to who gets the grants.

I have really tried as best I can, my job is to legislatively, both in terms of the legislation and in terms of the appropriation, create the opportunities for your profession.

Dr. RIDER. Right.

Senator WEICKER. At that stage of the game it should become a matter of medicine and not a matter of politics. I want to keep it that way.

Dr. RIDER. As I said, we could at least solicit some good grants, and that would be of great help. We are trying to stimulate that.

PREPARED STATEMENT

Senator WEICKER. Thank you very much. We appreciate it. Your statement will be inserted in the record.

Dr. RIDER. Thank you very much.

[The statement follows:]

STATEMENT OF DR. J. ALFRED RIDER

I am Doctor J. Alfred Rider, President of the Board of Trustees of the Children's Brain Diseases Foundation. It is a pleasure to testify before the Senate Appropriations Subcommittee on Labor, Health and Human Services, Education and Related Agencies and support the budget requests of the National Institute of Neurological and Communicative Disorders and Stroke.

Batten's disease is a neurological disorder which may have an incidence as high as 1 in 12,500 births, similar to other genetic disorders. It is probably the most common type of storage disease in children. It manifests itself in previously normal children at the approximate age of 4 to 8 and is characterized by a slow progression of clumsiness, stumbling, failure of vision, seizures, changes in personality and dropping of scholastic grades. The disease eventually leaves them totally disabled and unable to care for themselves and usually ends in death in the late teens or early twenties and rarely in the thirties.

One of the most promising theories about the disease has resulted from the discovery of an abnormality in the peroxidase enzyme system in the brains of children with Batten's disease. This results in an accumulation of a yellow pigment, ceroid lipofuscin, in the brain cells producing slow destruction and progressive deterioration. These changes are quite similar to the changes that take place in all brains as they age. Thus, effective treatment for Batten's disease might delay the normal aging process.

Considerable effort in the last year has been directed toward improving upon a blood chemistry test to identify children with the disease and their carriers. Additional studies have been done on the Kopang dogs and in sheep which have a disease similar to Batten's disease in humans.

Thus, we must continue to make funds available to continue with this vital research to better elucidate the pathophysiology of the disease, assist with genetic counseling, and initiate and evaluate therapy such as feeding or injecting peroxidase and /or various anti-oxidants. The basic cause of the disease is probably due to a defect in the peroxidase enzyme system in the brain. Research must be directed toward obtaining further evidence of this and initiate treatment with agents designed to block the accumulation of peroxidase or enhance its degradation. It is possible that pure enzyme may be obtained from the placenta or from DNA altered bacteria.

Research is the only way to solve this disease and prevent the devastating tragedy in families who have children so afflicted and effect tremendous savings to society as a whole. The cost of care for each child is enormous and may be as high as $50,000 to $100,000 a year. Thus, 10 children such as these would cost more per year than the funds we are requesting.

Finally, the possible spin off of enabling us to alter the aging process of senility in all humans makes the value of this reasearch unlimited.

The Children's Brain Diseases Foundation is doing the best it can to stimulate research on Batten's disease. For example, we are in the process of assisting with the development of two Batten disease centers, one at the University of Indiana and one at the University of Florida. Unfortunately, our abilities to raise money from private sources are limited, and the major monies must come from the NIH. There are over thirty four principal investigators from major universities, medical centers and institutes throughout the world interested in various phases of research pertaining to Batten's disease. (See addendum.) These researchers are in dire need of monies to continue their work.

We have always supported the budget presented by the National Institute of Neurological and Communicative Disorders and Stroke. We were very pleased that the Committee approved an increase from $335,197,000 in 1984 to $401,403,000 in 1985, an increase of $66,206,000. However, in spite of wording in the 1985 Appropriation Bill namely: "The Committee expects the Institute to continue the research effort on Batten's disease and related areas within the limits of high quality research available" very little money has been spent by the National Institute of Neurological and Communicative Disorders and Stroke in the past 7 years, and no applications were funded for 1985.

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solicit applications for grants of quality for Batten's disease and to fund up to $1,000,000 for research on Batten's disease".

If funding is provided, the chances of the development of a specific treatment program in the forseeable future appear to be very good. If monies are not provided, these efforts will come to a screeching halt.

ADDENDUM

Scientists Actively Working in Research on Batten's disease

1. Doctor Donald Armstrong
University of Florida, Department of Opthamology
Relationships of Peroxidase to Batten's disease
Canine Retinal Degeneration: An Approach to Therapy
Peroxidase Deficiency & Peroxidase Regulating Enzymes
Peroxidase Activity in Human and Canine Ceroid-lipofuscinosis, with Special Emphasis on the Eye

2. Doctor Robert J. Baumann
Department of Neurology
University of Kentucky & Section on Epidemiology OBE,
Office of the Director, N.I.N.C.D.S., Bethesda, Maryland
Leukocyte Ultrastructure

3. Doctor Milton Brightman
Lab. of Neuropathology & Neuroanatomical Sciences
N. I. N.C.S. & National Institutes of Public Health/
Department of Health and Human Services
Transport of Horseradish Peroxidase Across Blood Brain Barrier

4. Doctor Glyn Dawson
Associate Professor, Depts. of Pediatrics and Biochemistry
The University of Chicago
Pre-Natal Diagnosis and Enzyme Replacement Therapy
Approaches to the Detection of Neuronal Ceroid Lipofuscinosis in Cultured Skin Fibroblasts

5. Doctor T. L. Dormandy
Whittington Hospital, London
Free Radicals and Lipopigments

6. Doctor Edward Dratz
Associate Professor of Chemistry & Biochemistry
University of California, Santa Cruz
Measurement of Fluorescent Lipopigment, Peroxidized Fatty Acids, Vitamin E, Effects of Antioxidants on Lipopigment Formation

7. Doctor Paul Glees
University of Cambridge, Anatomy School, Cambridge
Electron Microscopic Studies on Neural Lipofuscin: Accumulation and Removal
The effects of Centrophenoxine in the Central Nervous System

8. Doctor H. H. Goebel
   Division of Neuropathology, University of Gottingen
   The Ultrastructural Spectrum and Diversity of Lipopigments in the Neuronal Ceroid-Lipofuscinosis

9. Doctor John M. C. Gutteridge
   Division of Antibiotics, National Institute for Biological Standards and Control, Holly Hill, Hampstead, London
   Fluorescent Products of Phospholipid Peroxidation: Formation and Inhibition in Model Systems

10. Doctor Egill Hansen
    Department of Opthalmology, Rikshopitalet, The National Hospital, University of Oslo, Norway
    The Significance of Psychophysical and Electrophysical Methods in the Diagnosis of Juvenile Neuronal Ceroid-Lipofuscinosis

11. Doctor Ann Harden
    Department of Clinical Neurophysiology, The Hospital for Sick Children, London
    Neurophysiological Studies in Children With so-called Neuronal Ceroid Lipofuscinosis

12. Doctor Denham Harman
    The University of Nebraska Medical Center
    Brain Lipid Composition

13. Doctor K. U. Ingold
    Associate Director, National Research Council of Canada Division of Chemistry
    Resistance to Oxidation and the Natural Antioxidant Levels in Membranes from Human Cells

14. Doctor Gunde Egeskov Jensen
    The Laboratory of Biochemistry and Toxicology, The Institute of Biology and Chemistry, University of Roskilde, Denmark
    Glutathione Peroxidase Activity in Leucocytes, Erythrocytes and Serum from Juvenile Form of Neuronal Ceroid Lipofuscinosis

15. Doctor R. D. Jolly
    Department of Veterinary Pathology and Public Health, Massey University, Palmerston North, New Zealand
    Ceroid-Lipofuscinosis: The Ovine Model

16. Doctor Edwin Kolodny
    Associate Director, Eunice Kennedy Shriver Center for Mental Retardation, Inc., Waltham, Massachusetts
    Pathogensis of the Neuronal Ceroid-Lipofuscinosis

17. Doctor Nils Koppang
    Veterinaerinstuttet, Oslo, Norway
    Histochemical Evidence of Lipid Peroxidation in Canine Ceroid Lipofuscinosis

18. Doctor Martin M. Maltempo
    Assistant Professor of Physics, University of Colorado Medical Center
    Monitoring of Peroxidase and Free Radicals in Canine Retinal Tissue Subject to a Degenerative Disease in Which There is an Accumulation of Pathologic Lipopigments of the Ceroid Type: A Model for Batten's disease

19. Doctor Jaime Miquel
    NASA, Ames Research Center, Moffett Field, CA
    Analysis of Pigment Lipofuscin

20. Doctor Erling Gronvold Olsen
University Eye Department,Rikshospitalet, University of Oslo, Norway
Fluorescein Angiography in Ceroid Lipofuscinosis

21. Doctor Vimal Patel
Assistant Professor of Pathology
Indiana University School of Medicine
Antioxidant Treatment of Batten's Disease

22. Doctor Alan K. Percy
Associate Dean, Office of Research, Charles R. Drew Postgraduate Medical School, Los Angeles
Salutory Effect of Selenium, Erythrocyte Glutathione Peroxidase

23. Doctor Michel Philippart
Neuropsychiatric Institute, University of California, Los Angeles
Treatment of Batten's disease with Antioxidants

24. Doctor Mark Poznansky
Associate Professor of Pathology, University of Alberta
Enzyme Replacement and Enzyme Engineering

25. Doctor Raju Pullarkat
New York State Institute for Basic Research in Mental Retardation
Lipopigments in Aging and in Ceroid-Lipofuscinosis
Docosahexaenoic Acid Levels in Brains of Various Forms of Ceroid-Lipofuscinosis

26. Doctor Julius Schultz
Director, Pananicolaou Cancer Research Institute
Miami, Florida
Discovery and Characteristics of Leukocyte Peroxidase and the Purification and Administration to Animals

27. Doctor Gunther Schwendemann
Division of Neuropathology, University Hospital, Eppendorf, Hamburg
Diagnosis of Juvenile Ceroid-Lipofuscinosis by Electron Microscopy of Lymphocytes and of Rectal, Skin and Sural Nerve Biopsy Tissue

28. Doctor Aristotle Siakotos
Professor of Pathology, Indiana University Medical Center
Development of a Reliable Blood Test for Batten's disease
Recent Developments in the Isolation and Properties of Autofluorescent Lipopigments

29. Doctor P. E. Spoerri
Department of Histology and Neuroanatomy, University of Gottingen, Gottingen
Ultrastructural Age Changes in Neurons and Myocardium in Culture. The effects of Centrophenoxine on Age Pigment.

30. Doctor Satish Srivastava
Department of Human Biological Chemistry & Genetics
The University of Texas Medical Branch
Purification and Properties of Leukocyte Peroxidase
Biochemical Studies in Neuronal Ceroid-Lipofuscinosis

31. Doctor Al Tappel
Division of Food Science & Technology, University of California, Davis
Properties and Functions of Flutathione Peroxidase and Pentane Analysis of Lipid Peroxidation Damage to Quantitate Effects in Nutrition

32. Doctor T. Westermarck
Rinnekoti Institution for the Mentally Retarded, Espoo,
Institute of Radiation Protection, Helsinki, Finland
Sodium Selenite Absorption and Losses in Spielmeyer-Sjogren Type of Neuronal Ceroid Lipofuscinosis (Batten's disease) Using Total Body Counting for ^{75}Se Detection
Studies on the Effects of Selenium Administration to Neuronal Ceroid Lipofuscinosis Patients with Special Reference to Reduced Glutathione

33. Doctor John R. Wherrett
Professor of Neurology Program, University of Toronto
Isolation of Fluorescent Material in the Juvenile Form of Batten's disease

34. Doctor Leon Wolfe
Hopital Neurologique de Montreal, Montreal Neurological Hospital, Canada
Characterization of the Accumulated Retinol Compounds in Batten's disease
An Analysis of Urine Sediment in Subjects with Batten's disease

35. Doctor R. D. Jolly
Massey University, Palmerston, New Zealand.
Studies on mannosidosis and ceroid-lipofuscinosis in cattle, sheep and dogs.

STATEMENT OF ROBERT J. RUBEN, M.D., CHAIRMAN, LEGISLATIVE COMMITTEE ON APPROPRIATIONS, AMERICAN ACADEMY OF OTOLARYNGOLOGY HEAD AND NECK SURGERY

Senator WEICKER. Dr. Robert Ruben, chairman of the Legislative Committee on Appropriations of the American Academy of Otolaryngology Head and Neck Surgery.

Dr. RUBEN. Mr. Chairman, members of the committee, I am Robert Ruben, chairperson of the Department of Otolaryngology of the Albert Einstein College of Medicine of Yeshiva University and the Montefiore Hospital and Medical Center in the Bronx, NY.

Before I go to my prepared script, I would like to thank you, Mr. Weicker, for the leadership and work that you have done in an effort to try to bring the resources which you have originally wanted to bear on the biomedical research area. The problems with the cuts were devastating, are still devastating, but the work you have personally done is appreciated by this person and the many people you represent in the laboratories. Thank you, sir.

Senator WEICKER. Thank you.

Dr. RUBEN. Today I represent The American Academy of Otolaryngology Head and Neck Surgery. This is the largest organization of otolaryngologists head and neck surgeons in the world, with 8,000 active members, including 96 percent of all board-certified otolaryngologists.

The specialty of otolaryngology head and neck surgery has developed over a period of 150 years, beginning in the first quarter of the 19th century as a result of new knowledge about the ear and throat. Originally the specialty included the physicians and surgeons who treat the eye, but that was separated and became a separate discipline in the seventies.

During our history, numerous scientific and technical advances allowed us to develop clinical methods to care for and cure a large number of diseases and disorders, including the ability, in the 19th century, to put a tube in the throat of a child so that the child could not choke to death from diptheria and the development of an operation to drain pus away from the brain through the ear.

The 20th century brought many more advances such as operations which can restore hearing, cure most cancers of the voice box, and reconstruct faces of people severely wounded in accidents and in war.

Today, one of our major concerns is the development and safe, effective implantation of an artificial inner ear, a device and procedure which promises to give and restore some hearing to many of our deaf fellow citizens.

Otolaryngologists care for a large and diverse number of diseases which affect the structures of the head and neck. The image of the ear, nose, and throat doctor is no longer an adequate or accurate description of a contemporary otolaryngologist head and neck surgeon. We practice both medicine and surgery. Our colleagues in the neurological domain have separated their work into that done by physicians—neurologists—and that done by surgeons—neurosurgeons. Our specialty is not so divided.

Otolaryngologists work in many broad areas. The contemporary otolaryngologist head and neck surgeon must undergo intense training for at least 5 years after medical school in order to learn how to provide expert care for the diversity of maladies encountered.

Scientific research is the basis for all of the advances which we have been able to make in the care and cure and prevention of diseases.

We need to make sure that those who are aged—and that must include all of us sooner or later—will be able to lead productive and useful lives. The uniqueness of otolaryngology is that much of what we are doing, and could be doing if only we knew more, enhances life for the young throughout their lives and for the old near the end of their lives.

Numerous scientific research projects are being supported by various Institutes of the National Institutes of Health and by the National Aeronautics and Space Administration, Department of Defense, National Science Foundation, and other Government agencies.

However, there is much going on we really do not know at the present time. We need better means for delivering health care.

The American Academy of Otolaryngology Head and Neck Surgery supports the recommendations of the ad hoc group for medical research funding and urges you to appropriate at least $5.704 billion for the National Institutes of Health during fiscal year 1986.

Thank you very much.

PREPARED STATEMENT

Senator WEICKER. Thank you very much, doctor. We appreciate your testimony. We will include your statement in the record.

[The statement follows:]

STATEMENT OF DR. ROBERT J. RUBEN

I am Robert J. Ruben, M.D., Chairperson of the Department of Otolaryngology of the Albert Einstein College of Medicine of Yeshiva University and the Montefiore Hospital and Medical Center in the Bronx, New York.

I represent The American Academy of Otolaryngology—Head and Neck Surgery. This is the largest organization of otolaryngologists—head and neck surgeons in the world, with 8,000 active members, including 96% of all board-certified otolaryngologists.

We practice medicine and surgery of the ear, nose, throat and other parts of the head and neck region. Each year we handle 45 million office visits and perform in excess of 7 million operative procedures.

The specialty of otolaryngology—head and neck surgery has developed over a period of 150 years, beginning in the first quarter of the 19th century as a result of new knowledge about the ear and throat. (Originally, the specialty included the physicians and surgeons who treat the eye, too, but in the 1970's ophthalmology and otolaryngology became separate disciplines.) During our history, numerous scientific and technical advances allowed us to develop clinical methods to care for and cure a large number of diseases and disorders, including the ability, in the 19th century, to put a tube in the throat of a child so that the child could not choke to death from diptheria and the development of an operation to drain pus away from the brain through the ear.

The 20th century brought many more advances such as operations which can restore hearing, cure most cancers of the voice box, and reconstruct faces of people severely wounded in accidents and in war.

Today, one of our major concerns is the development and safe, effective implantation of an artificial inner ear, a device and procedure which promises to give and restore hearing to many of our deaf fellow citizens.

Otolaryngologists care for a large and diverse number of diseases which affect the structures of the head and neck. The image of the "ear, nose and throat" doctor is no longer an adequate or accurate description of a contemporary otolaryngologist—head and neck surgeon. We practice both medicine and surgery. Our colleagues in the neurological domain have separated their work into that done by physicians (neurologists) and that done by surgeons (neurosurgeons). Our specialty is not so divided.

Otolaryngologists work in several broad areas. Most frequently, we intervene in order to improve the quality of a person's life: for example, a medical examination prior to prescribing a hearing aid for a septuagenarian, or the removal of a benign growth from the voice box. An otolaryngologist also often is called upon to save lives by removing, in an emergency situation, a foreign body from the windpipe of an infant, or by performing an operation to cure cancer of the neck.

The contemporary otolaryngologist—head and neck surgeon must undergo intense training for at least five years after medical school in order to learn how to provide expert care for the diversity of maladies encountered. Often, advanced fellowship training years are added voluntarily so that he/she can become more knowledgeable and proficient in applying the fruits of our science to the betterment of our patients.

Scientific research is the basis for all of the advances which we have been able to make in the care and cure, and prevention of diseases. Continual basic and applied research supplies the only certainty that we will have an increased ability to improve the quality of life for our citizens.

This becomes especially important now, because of the increased life span of the population. We need to ensure that all newborn children have the ability to function optimally during the 80 or more years they are likely to live.

We need to make sure that those who are aged - and that must include all of us sooner or later - will be able to lead productive and useful lives. The uniqueness of otolaryngology is that much of what we are doing - and could be doing if only we knew more - enhances life for the young throughout their lives and for the old near the end of their lives.

There is no more important aspect of human life than the ability to communicate. Members of this specialty care for the ability of people to communicate with one another through speech and hearing. A lack of these communication abilities can too often condemn children to second-class citizenship, because of the failure to develop adequate language ability; it can force older persons to become prisoners of silence, which may result, in turn, in severe emotional illness.

Numerous scientific research projects are being supported by various Institutes of the National Institutes of Health and by the National Aeronautics and Space Administration, Department of Defense, National Science Foundation, and other government agencies. All are helping develop the basic and applied science needed to further our ability to treat patients more effectively and efficiently. Unfortunately, too little of this new understanding and technology has reached our patients in the form of improved diagnostic and treatment possibilities.

We need strong NIH support both to continue scientific advances and to translate more of the exhilarating results from laboratories and model systems to the current medical/surgical practice of otolaryngology—head and neck surgery.

We need strong NIH support to build and maintain a cadre of innovative clinician scientists who can accomplish that translation.

Among research areas ripe for exploitation are the identification of the genetic abnormalities which are the basis for at least 50% of all hearing loss in both the young and the elderly. Another is the characterization of the immune systems of the head and neck region. The latter work is essential for the cure of many cancers of the head and neck, for the control of infections in the head and neck, and for more effective treatment of what is commonly known as allergy.

We need better means for delivering already known treatments for hearing and speech disorders to special underserved groups such as the domiciled elderly. I wish to emphasize that these are just some of the critical areas of opportunity which we otolaryngologists—head and neck surgeons wish to pursue so that we may further improve the quality of our citizens' lengthening life span.

The American Academy of Otolaryngology—Head and Neck Surgery supports the recommendations of the Ad Hoc Group for Medical Research Funding and urges you to appropriate at least $5.704 billion for the National Institutes of Health during FY 1986. We feel that this increase is in keeping with Congress's desires to hold down costs without seriously and permanently damaging what has become this nation's, and the world's, most important resource for improving health and the quality of life.

From our perspective as otolaryngologists—head and neck surgeons, this is the minimum level of funding which will be required if NIH is to sustain its support of the basic and applied research and research training essential to this specialty's effort to improve the well-being of all Americans afflicted with hearing or speech disorders and the vast array of infections, allergies, cancers, congenital defects and traumatic injuries affecting the head and neck region.

Finally, Mr. Chairman, we express our very deep appreciation for your support over the years for all of biomedical research, and especially for that provided in our area of work.

I will be pleased to answer any questions you may have.

STATEMENT OF LEON ROSENBERG, M.D., DEAN, YALE UNIVERSITY SCHOOL OF MEDICINE, ASSOCIATION OF AMERICAN MEDICAL COLLEGES

Senator WEICKER. Next we have Dr. Leon Rosenberg, dean of the Yale University School of Medicine. Good to see you down here.

Dr. ROSENBERG. Thank you, Senator.

Senator WEICKER. How are you enjoying your new duties?

Dr. ROSENBERG. I am enjoying them very much. It is a good school, as you know.

Senator WEICKER. It sure is. It is great to have you here.

Dr. ROSENBERG. Thank you.

Senator Weicker, members of the subcommittee, I currently serve as dean at the Yale University School of Medicine. Today I am appearing before you on behalf of the Association of American Medical Colleges.

In view of the brevity of the allotted time and the forewarning that you are a fast whistle, Senator, I want to take just a moment at the outset to express the profound gratitude of the academic community to you personally for your deep commitment to and most effective work on behalf of a shared set of values and priorities; that is, the overriding importance of education and research that we academicians hold precious and deem critically important to the future of our country. I mean that as sincerely for as many members of the academic community as I can express.

The Association of American Medical Colleges, or AAMC, appreciates the opportunity to appear before the subcommittee during its deliberations on the fiscal year 1986 appropriations for the Department of Health and Human Services and Education.

PREPARED STATEMENT

I would like to summarize my remarks here and ask that my full written statement be included in the record.

[The statement follows:]

STATEMENT OF LEON ROSENBERG

The Association of American Medical Colleges (AAMC) appreciates this opportunity to present its views on Federal appropriations for Fiscal Year 1986. The Association is the national voice for 127 medical schools, over 430 teaching hospitals, and nearly 80 academic and professional societies whose members are engaged in medical school teaching, patient care, and biomedical and behavioral research.

Quite simply, the funding levels proposed for health research, student assistance, and medical programs in the President's FY 1986 budget pose a grave threat to the health and well-being of the American people -- a graver threat, perhaps, than that posed by the President's precedent-breaking FY 1982 budget submission.

Biomedical and Behavioral Research

The staggering toll of death, disease, disability and human suffering both in this country and around the world can be alleviated by only one process - basic life sciences research, followed by the conversion of knowledge derived from that research into practical applications. The only practical sources of funding and manpower resources for this crucial basic research are the National Institutes of Health (NIH) and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA). The result of NIH and ADAMHA support of the Nation's biomedical and behavioral research enterprise has been nothing short of awe-inspiring, holding out the promise of extending the lifespan and improving the quality of life for people the world over.

The Congress, which has always recognized the importance of basic life sciences research and its significant contribution to the health and well being of the American people and the strength of our economy, appropriated $5.149 billion for NIH and $392.5 million for the research activities of ADAMHA in FY 1985 -- sums sufficient to significantly expand the Federal investment in biomedical and behavioral research, thereby assuming that new and exciting research opportunities would be pursued and that the pool of competent young research investigators would be enlarged. That was a wise decision. The AAMC applauds it and hopes that the Congress will not allow it to be rescinded.

Nevertheless, the President's budget actually proposes a decrease from the FY 1985 Congressional appropriation of 6 percent for NIH and 1 percent for the research activities of ADAMHA. The President's proposal would, if enacted, have an extremely deleterious impact on the United States preeminence in health sciences research, and would severely impede progress in the health sciences and applications of those sciences to the solution of health problems.

The proposed budget also would have a chilling effect on the ability of the health research community to attract well trained young investigators to chosen fields of research. The spectacular success of American health science is directly attributable to the ideas and energy of our young scientists. However, the consistently low funding levels proposed by the President over the years, reinforced in the President's FY 1986 budget, will result in a "Catch - 22" situation: the budget will foreclose the pursuit of promising new research opportunities now, and the loss of a cadre of new young investigators will hamper research in the future.

The AAMC has joined together with over 130 other organizations whose members are engaged in biomedical and behavioral research to support the funding counterproposals of the Ad Hoc Group for Medical Research Funding, which is recommending FY 1986 budgets of $5.704 billion for NIH and $499.0 million for the research activities of ADAMHA, representing respective increases of 10.8 percent and 26 percent from the FY 1985 Congressional appropriations for those agencies. This recommendation is essentially to maintain the current services level of activity enacted in the FY 1985 appropriations bill. The Ad Hoc Group proposal would provide funds sufficient to make awards to a minimum priority score of 180 and an award rate of 38 percent at NIH, and corresponding figures of 180 and 42 percent at ADAMHA. Even at this level, however, approximately 2400 high quality research grant applications at NIH and 125 at ADAMHA would not be funded. Additionally, the proposal provides for continuation of high-quality clinical trials, an increase in the number of research trainees, tiny increases in facility construction funds, and maintenance of current services levels in other programs.

Student Assistance

It has long been the view of the AAMC that medical students and/or their families, to the extent that they are able, should bear the costs of their education, either out of pocket or through borrowing. In the latter connection, they are particularly dependent on the federal government for financial assistance. Under the Administration's FY 1986 budget request, many of the student aid programs authorized under Title VII of the Higher Education Act would be severely reduced or eliminated outright.

The Administration is proposing no funds for Health Professions Student Loans (HPSL) which provide medical students with an important source of relatively inexpensive loan capital, once their Guaranteed Student Loan (GSL) funds are exhausted. The AAMC thus urges that $7.5 million be provided for the relatively low-interest (9%) HPSL loans to help modulate the trend of ever high indebtedness for medical school graduates. In 1984, the mean debt for fresh M.D.s with debt was $26,496, a level threatening to limit their ability to choose careers in primary care or to locate to manpower shortage areas. The Exceptional Financial Need (EFN) and Disadvantaged Assistance Scholarship programs, which the Administration also proposes to "zero out", are bright rays of hope and promise to those students who are extremely disadvantaged. The AAMC recommends that these programs be restored to at least a current services level for FY 1986.

In the 1983-1984 academic year, medical students borrowed $78.8 million---at market level interest rates---of the $237 million borrowed under the Health Education Assistance Loans (HEAL) program. The reduction in the aggregate HEAL guarantee limit that the Administration proposes, from $250 million to $100 million, would be especially harmful since it provides no means for a rational or equitable allocation of the reduced credit limit among the students of the several eligible health professions. Additionally, authority is proposed for the HHS Secretary to raise the HEAL insurance premium to 5 percent, substantially higher than the need predicted and thereby increasing the cost of borrowing. The AAMC recommends a HEAL credit limit of $300 million, pending reauthorization of the program.

The AAMC also adamantly opposes the Administration's proposals for Title IV student aid programs, which provide over half of all student aid received by medical students. We are particularly opposed to the concept of a limit of $4,000 on Title IV student aid programs (GSL, NDSL, and College Work Study). Given the regrettable but nevertheless unavoidable rise in the costs of medical education, and the shrinking number of alternatives available to students to secure educational assistance (especially if the President's proposals are adopted), the imposition of this limit is especially regrettable.

Like most everyone in the higher education community, the AAMC views the President's proposed constrictions on the Guaranteed Student Loan (GSL) program as a serious threat to the ability of students to enter and continue to attend educational institutions. Over 40,500 medical students -- 60 percent of total medical school enrollment in the United States -- took out GSL's in 1984, and they would be devastated if the Administration's proposals are implemented. No changes should be made to the GSL that would limit borrower eligibility.

The Administration also proposes to "zero out" a variety of health professions education programs within the purview of the Health Resources and Services Administration (HRSA). These programs, designed to ensure an adequate supply of well-trained health care professionals in medically underserved or medically indigent areas, should be funded at least current services levels.

Medicare and Support of Graduate Medical Education

Three of the Administration's major proposals regarding the Medicare system would result in an unparalleled loss of Medicare revenues for teaching hospitals, and seriously weaken their financial stability.

First, the Administration proposes a 50 percent reduction in the so-called indirect medical education adjustment. The resident-to-bed adjustment was originally developed to create a "level" playing field for teaching and non-teaching hospitals under the prospective payment system (PPS). Unfortunately, old and often incorrect data on resident numbers, bed complement, wage rates, and DRG case mix were used in estimating the adjustment. In addition, two variables not included in the final payment system, bed size and urban area size, were included in the formula used to compute the adjustment. The resident-to-bed adjustment is a crucial equity factor in prospective payment. Therefore, the AAMC supports recomputing the resident-to-bed adjustment using current hospital resident and bed data, up-to-date corrected hospital case mix indices, corrected wage indices, and a regression equation which incorporates only variables used in determing hospital DRG payments. it should be properly estimated. A more defensible adjustment can be obtained if the adjustment is re-estimated with an equation based only on the factors used in prospective payment to vary DRG prices and with up-to-date, accurate data.

Second, the Administration calls for a freeze in the hospital-specified, regional, and urban prices used to determine DRG payments. The prospective payment system was enacted to encourage hospitals to reduce costs; they are doing so, while also experiencing a drop in admissions. Therefore, in an economy that is still experiencing significant inflation and with a Medicare population that includes growing numbers of the frail elderly, the AAMC believes it is inappropriate to impose a price freeze and ignore the increased costs hospitals must incur for the personnel, goods, and services they acquire.

Third the Administration proposes a permanent freeze in payments for direct medical education costs. Teaching hospitals are multi-product enterprises. In addition to patient care services, they provide clinical training programs for graduate medical, nursing, and allied health education. Since its inception, Medicare has supported its fair share of these program costs. Reducing Medicare support will weaken these manpower development programs, and will set a precedent which other payers may cite as the basis for reducing their support. The AAMC strongly recommends that public policy on financing graduate medical education be fully debated and resolved prior to altering the current passthrough.

The AAMC also opposes the 12-month extension of the freeze on the updating of the customary and prevailing charge levels for physician services. Furthermore, the AAMC opposes the Administration's proposed reductions in Medicaid payments.

We appreciate the opportunity to present our views to the Subcommittee on these vitally important issues, and hope you will give them your most serious consideration.

Dr. ROSENBERG. Quite simply, the funding levels proposed in the President's fiscal year 1986 budget for health research, student assistance, and health service programs pose a grave threat to the health and well-being of the American people, a graver threat I believe than that posed by the President's precedent-breaking fiscal year 1982 budget.

Let me first talk a moment about biomedical and behavioral research. The toll of death, disease, disability, and human suffering in this country and around the world can be alleviated by only one process—basic life sciences research, followed by the conversion of knowledge derived from that research into practical applications.

The key sources of funding for this country's crucial basic research programs are the National Institutes of Health and the Alcohol, Drug Abuse and Mental Health Administration, ADAMHA. The result of NIH and ADAMHA support of the Nation's biomedical and behavioral enterprise in these fields has been nothing short of awe-inspiring, resulting in the promise of extending the lifespan and improving the quality of life for people the world over.

Nevertheless, the President's budget actually proposes a decrease from last year's congressional appropriation of 6 percent for NIH and 1 percent for the research activities of ADAMHA. The President's proposal would, if enacted, have an extremely deleterious impact on the U.S. preeminence in biological and behavioral research and would delay significantly the conquest of many diseases.

The AAMC has joined together with over 140 other organizations engaged in biomedical and behavioral research to support the funding counterproposals of the ad hoc group for medical research funding, which has recommended fiscal year 1986 budgets of $5.704 billion for NIH and $499 million for the research activities of ADAMHA.

The recommendation would essentially maintain the current services level of activity enacted in the fiscal year 1985 appropriations bill and provide for very modest additional increases in selected programs.

Let me next say something about student assistance. Many of the student assistance programs authorized under title VII of the HPSL and title IV of the Higher Education Act upon which medical students depend so heavily would be severely reduced or eliminated outright in the President's fiscal year 1986 budget.

The administration is proposing no funds for health professions student loans. The AAMC urges that $7.5 million be provided for the relatively low interest HPSL loans to help modulate the trend of ever high indebtedness for medical school graduates. A $150 million reduction in the health education assistance loans credit limit would be especially harmful since it provides no means for a rational or equitable allocation of the available credit among students in the several eligible health professions.

The AAMC recommends a HEAL credit limit of $300 million, pending authorization of the program.

The administration proposes to zero out a variety of health professions education programs in title VII of the HPSA that are designed to ensure an adequate supply of well-trained health care professionals. These we believe should be funded at least at current service levels.

Further elucidation on AAMC's position on these issues is provided in the statement we have provided for the record, including our opposition to several items for Medicare and Medicaid as they affect medical education.

Senator Weicker, this concludes my remarks. Again, I express my great gratitude to you and would be happy to answer any questions you may have.

Senator WEICKER. In the budget hearings for fiscal year 1984–85, I was deeply concerned at that time about many of the community health programs, particularly as they affected pregnant women. It was even earlier than that. I guess I would go back to 1982–83.

I stated at the time it seemed to me that we are creating a situation where infant mortality could possibly be on the rise again. Everybody discounted all of that. I noticed in the New York Times yesterday we are apparently now once again seeing this is becoming a deep concern due to the fact that so many pregnant women, the first time the doctor sees them is when they get wheeled into the hospital. The community health centers, all of those have been wiped out. Obviously, that has created a problem, especially in many of the cities.

The most frustrating thing is that it is so easy for the President to say to the American people we are going to cut these moneys and go ahead and save money in the budget. That is understandable, especially when you are running such a high deficit. I have the more difficult task of explaining to the American people that if you do this, in a certain program such as we are discussing here, there is going to be outyear cost. Nobody gives a damn about the outyears, or maybe they can't visualize the outyears. But both in terms of the human suffering and in dollars and cents, no savings will have been achieved. So if the human aspect of it doesn't strike anybody, maybe they should understand what is being done strictly in a fiscal sense today with these cuts is going to create tremendous outyear costs, that instead you have guaranteed we will have to spend a lot more in the outyears to take care of these problems.

I suppose I am looking for help from your organization as to some way to explain to the American people what admittedly is a complex concept in terms of investments made in science and research and et cetera and how that comes to pass in future years. I am really looking for help on that matter.

Dr. ROSENBERG. All I can say is whatever help we can give, we stand ready to do so. The specific examples I think we could all mention go on for pages and hours. It is a hard thing to address this as an academician when we know there are major budget problems in the country. None of us like to sound as if we are selfish or self-seeking.

But on the issue of health research, that is simply not the case, Senator. You say it much better than I do. We are talking about programs that will cost more if they are not supported now. It would be a cruel shame to have the United States wake up to the need for increasing its biomedical research funding only because things like infant mortality or prematurity or other major conditions affecting the quality and lifespan begin to change in the wrong direction. I think we will get the attention of the American people very quickly then, but it would be nice to do it sooner.

Senator WEICKER. Maybe you can say, just for the benefit of the hearing here, for those who have a chance to observe these hearings—I am a layperson. Whatever knowledge I have is gained through the course of these hearings. But let's take Alzheimer disease, which is very much in the American consciousness today, because as we grow older, obviously it is something that affects more and more people. Would I be correct in saying that a steady level of funding here for research in Alzheimer is far superior and has a far greater guarantee of result? Although there is no absolute guarantee. If I turned to you and said the whole country got in a tailspin about Alzheimer and said, "Dr. Rosenberg, I will give you anything you want right now just for Alzheimer for this year," you can't do it in 1 year, can you? This is an ongoing process.

That is what I would like to have attested to by the people of the scientific community. You cannot stop it; nor can you cut all of that off.

Dr. ROSENBERG. No; you are absolutely correct. Research is an investment and it has to be a long-term investment. The idea that one can do crash programs in understanding Alzheimer disease or cystic fibrosis or why there are chromosomal abnormalities runs counter to the way science proceeds.

We build on small advances in most instances. Many times the major contributions affecting and understanding a disease like hypercholesterolemia or heart attacks due to cholesterol accumulation comes in ways we would not have predicted.

It is that establishment, that system of biomedical research that this country has spent so many years and so much effort building up that has to be protected.

Senator WEICKER. When did we pass the National Cancer Act?

A VOICE FROM AUDIENCE. 1971.

Senator WEICKER. It has been a period now of some 14, 15 years. I am sure everybody, myself included, felt when we threw that wad of dough into that act we would come up with a cure for cancer. It has been fascinating to watch the story unfold as it is clear there is no cure, one cure, for cancer. It is in many forms. The discovery process, cure process, has just been amazing to watch as it covers a broad spectrum of cancers and cures and whatever, and even overlapping in other matters that come to us now, such as AIDS and these others.

I can't think of a better object for the American people than this war we all thought would be won with one bullet that is going to hit it. It is clear we are getting on top of it, but thank God we put the resources there. But it is a pretty big ballfield.

Dr. ROSENBERG. What I think is a corollary to that is after 15 years of that commitment to understanding and curing cancer, some of the most significant observations have just been made in the past 2 or 3 years. Our idea of what ontogenes are and how they might relate to transforming cells, of how chromosome modifications may put genes that we all carry in a place that now causes cancer, these have all come about because of that long-range investment in basic genetics, in basic cell biology. The payoff for an understanding of cancer, for early diagnosis and, I am sure, ultimately for treatments is going to be major. But it has been a long-term investment, not a short-term war.

Senator WEICKER. In the past 10 years, am I correct when I say that the life expectancy for many forms of cancer has increased dramatically?

Dr. ROSENBERG. Oh, yes. We couldn't talk about curing cancers, with very rare exceptions, in 1971. I think it is amazing to me that in the relatively short lifetime of my career in medicine you can talk about the cure of childhood leukemia in a very considerable fraction of individual kids. More than 50 percent of the children now with onset leukemia survive beyond 5 years. All forms of cancer have a higher 5-year cure rate by far than they did 20 years ago.

There is still plenty to be done, but the progress has been made. It just doesn't usually come as some burst, or some cosmic event.

Senator WEICKER. I thank you very much for your testimony. I greatly appreciate your coming down here.

There are some questions Senator Specter has for response to the record, Dr. Rosenberg, and we will see you get those.

[CLERK'S NOTE.—No response to date.]

Dr. ROSENBERG. Thank you.

PREPARED STATEMENTS

Senator WEICKER. Thank you very much. Your statement will be included in the record at this point along with other statements for the record on appropriations for the National Institute of Neurological and Communicative Disorders and Stroke.

[The statements follow:]

LETTER FROM KIMBERLY MISAJET

I am writing to express my personal opposition to the use of our tax dollars to support National Institutes of Health financed animal experiments at the University of Pennsylvania.

The Animal Plant Health Inspection Services of the USDA has cited 74 violations of the Animal Welfare Act at this laboratory. The infamous Gennarelli tapes show not only gruesome bashing of baboons' heads but also reseachers smoking while operating on a baboon, or droping a scalpel onto the floor, picking it up and continue in the operation. In short the Head Injury Clinic Laboratory is vivisection at its worst.

I do not want our tax dollars to support the torture of more baboons. This is a torture which we fail to understand its applicability to human injuries. Please use the authority of your position to begin an investigation into allegations of scientific misconduct and violations of federal funding regulations regarding the Head Injury Clinic at the University of Pennsylvania.

your assistance will be greatly appreciated.

Sincerely, Kimberly Misajet

134 Lincoln Ave.
Clifton, NJ 07011

PETITION REGADING DR. GENNARELLI AT UNIVERSITY OF PENNSYLVANIA

"Written Testimony, for the record, on National Institute of Neurological and Communicative Disorders and Strokes grant to Dr. Gennerelli at the University of Penn".

After having viewed the Gennarelli tapes, we implore you to use common sense in denying any tax dollars to Dr. Gennarelli. His experiments are unspeakably cruel and unscientific. After primates' brains are crushed with metal devices, the devices are then removed with screw drivers and hammers which clearly invalidates any so called "scientific" results. Obviously from the film, animals are not anesthetized. The lucky ones are killed rapidly. Others suffer rupture of the brain, comma, and complete paralysis... and linger in this pitiful condition for up to seven months. Baboons heads are not spherically shaped like ours and injuries to them cannot accurately reflect injuries to the human head. Typical of many experimental laboratories, Gennarelli's lab was blood-spotted and littered with filthy bandages and unwashed surgical equipment. There was no evidence of anesthesia or pain killers.

The details of these medievil "medical" experiments are sickening and almost unbelievable. They have been graphically documented by over 70 hours of video tapes taken by the experimenters themselves at The University of Penn.

What results have we seen? They have produced a new "description of head injury". Like all experimenters whose funds are being denied, they now claim they are on the "threshold of new discovery". We've heard this from the cancer researchers for 40 years.

We unequivocally oppose this grant to Dr. Gennarelli, who is presently at the University of Penn., and to anyone else using live animals for experimentation.

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STATEMENT OF LEIGH KENNEDY

Funding for the Head Injury Clinic must STOP! No fair investigation of Dr. Gennarelli's clinic has ever taken place, and the evidence of sloppy research methods and cruelty to animals is overwhelming (and well-documented).

APHIS of the USDA has cited 74 violations of the Animals Welfare Act and this is only the tip of the iceberg. Furthermore, many of the procedures used were not a part of the orginal research protocol, and this may have invalidated the research.

I am outraged that Dr. Thomas Gennarelli is getting tax money to the tune of $1 million dollars a year. Not only is he abusing animals, he is abusing federal funds and a public trust.

Please act now to disallow any future funding for him.

STATEMENT OF PAULETTE CALLEN

I consider funds given to Thomas Gennarelli a gross misuse and waste of tax dollars.

Dr. Gennarelli's research is not being conducted up to the standards commonly required in the scientific community for any results to be valid.

There is no reason, other than to line the pocket of Dr. Gennarelli, to conduct such research at all, since the conformation of the baboon head is not similar enough to the human head to render these experiments worthwhile. His experiments have been going on for at least ten years. How many heads must he bash in before Dr. Gennarelli finds out what he wants to know?

Furthermore, there is no moral justification for continuing to torture sentient creatures who obviously suffer untold agonies from these experiments. It is time for law makers to take a hard look at our moral responsibilities toward living beings, even when those beings are non-human. We have blindly thrashed ahead sacrificing life, in whatever form we found it, in the name of science and for the so-called good of humanity. That path has led us to a planet that is poisoned throughout, species that are dead and dying, and laboratories bursting with individual lives groaning out their days in agony. There must be a fundamental change in how we deal with life other than human life. Our own survival depends upon this change occurring quickly.

You have an opportunity to initiate this change. I urge all of you on the committee to see the films, taken by Gennarelli's own staff, before making a decision. See for yourselves if you want your money to be used in this way. I know that I do not want a single penny of mine to be thrown in his direction. These films will be shown for Congress on May 3. They are available for the asking from PETA (People for the Ethical Treatment of Animals).

This is not a sentimental issue, nor does it have anything to do with whether you like animals. It is a matter of ethics, which are the foundation of our laws.

I would like to add that I believe an animal has a right to live unstressed by humans, that an animal is not worthwhile only in so far as he/she can be exploited by humans.

Who do we think we are?

Statement of Liz Grayson

You are hearing testimony of the unscientific nature and the irrelevancy of the findings of the head injury experiments at the U.

of Penn. I cannot add to what has already been said except to affirm that absolutely no more money should be given to Dr. Gennarelli for any purpose whatever.

When the lives of the leaders of an animal rights group are threatened if they appear at a rally on the U. of Penn campus; when a studen of the U. of Penn. is afraid to talk about the lab to an "outsider" because he has been warned in his classroom by a teacher that if he does so he will put himself in "scholastic jeopardy" (read: "loose his scholarship"); when the lab itself is shrouded in secrecy, as it most certainly has been -- then it is clear that what this institution is protecting is not its aura of bonafide scientific inquiry but, rather, the stench of corruption.

Cut off Mr. Gennarelli's funds and close down his "house of pain."

Letter From Lauren D. Young

I am writing to urge you to oppose any funding of the Head Injury Clinical Research Center (HICRC) at the University of Pennsylvania. In particular, I am referring to NIH grant number NS.088803-13 filed under Thomas Langfitt of the University of Pennsylvania.

Under the supervision of Drs. Thomas Langfitt and Thomas Gennarelli, the HICRC has used Federal money for over 10 years to inflict brain damage on hundreds of conscious, unanaesthetized primates. Recently they applied for additional tax monies to subsidize the continuation of their research practices.

Dr. Gennarelli's experiments are supposedly to learn how to: 1) prevent head injuries or reduce them to "tolerable levels," and 2) treat these injuries. While his goals are admirable, his reseach methods are deplorable.

On April 27th, I participated in the "Rally Against Gennarelli Experiments" on the Penn campus. At that time, I had the opportunity to see excerpts from the tapes removed from Dr. Gennarelli's lab by the Animal Liberation Front. What I saw on those tapes shocked me.

These videotapes made by Dr. Gennarelli and his staff show that these researchers failed to use procedures that conform to both the Federal Animal Welfare Act and the National Institutes of Health "Guide for the Care and Use of Laboratory Animals." Among the atrocities explicitly shown on these tapes were: conscious, struggling baboons tied to an operating table; researchers laughing and joking as they mock the brain-damaged baboons and force them to pose before the video camera; animals being hit with a hammer to remove the helmets which attached them to the head injury device; researchers performing surgery on primates while they explicitly acknowledge the animals are feeling excruciating pain; researchers smoking as they perform surgery on animals; researchers performing surgery with instruments that they dropped on the floor and reinserted into the animal's head without bothering to resterilize.

The subcommittee will have the opportunity to view some of these tapes when they are shown to Congress on May 3rd.

To date, the University of Pennsylvania has refused to respond to requests to halt the experiments. It has also failed to conduct an independent investigation of the charges made by concerned animal activists. In addition, the District Attorney of the City of Philadelphia has failed to investigate allegations of cruelty by Dr. Gennarelli.

This brutality cannot be allowed to continue. Our best course of action is to stop the money that finances this research.

Again, I ask you to please oppose NIH grant number NS.088803-13. Thank you for your time.

Sincerely yours,

Lauren D. Young

Lauren D. Young

Statement of Ruth Slauson-Snediker

The Gennarelli Laboratory has been cited by the A.P.H.I.S. of the U.S.D.A. with 74 violations of the Animal Welfare Act. These citations can only be in regard to cage sizes and ventilation problems, not the research itself. As a Registered Nurse, I can testify that housing conditions are always an upswing of the operating system. The research area must be, by nature, worse. The film, "Necessary Fuss", which was confiscated bears truth to this statement.

Dr. Gennarelli is applying to renew his N.I.H. grant (N.S. 088803-13, filed under Thomas Langfitt of the University of Penn). I oppose this grant vehemently. The H.I.C.L. must not receive any funding. This is a brutal mockery of a proper research establishment. I shutter to think of how much of this calibre behavior may be research reality, only kept under wrap. Thank God some people care enough to become the C.I.A. for these pitiful creatures.

Now we have the motive and the ability to close this horror lab.

I have faith in your principles as a human being and I thank you.

Sincerely,

Ruth Slauson-Snediker

Ruth Slauson-Snediker, R.N.

Statement of Phil Metzger and Shirley Porter

We are unalterably opposed to any funding for Dr. Gennarelli's barbaric experimentation using animals. All such experimentation, and his in particular, is offensive to caring, feeling humans. It is morally wrong for our dominant species to inflict pain, suffering, or deprivation of any kind on other species simply because we have the power to do so. We oppose animal experimentation whether or not such experimentation leads to improvements in human health. We do not have the right to sacrifice other species for our own needs.

STATEMENT OF JOANNE BLASKOVICH

Very shortly, Dr. Thomas Gennarelli of the Head Injury Clinic Laboratory (HICL) will be applying to renew his NIH grant (NUMBER NS. 088803-13 , filed under Thomas Langfitt of the University of Pennsylvania). Dr. Gennarelli has received approximately $1 million a year for the past ten years. He now expects to receive an additional $1.5 million of our tax dollars.

As a concerned anti-vivisectionist and taxpaying citizen, I urge you to oppose this grant. The gruesome practices which occur on a daily basis at this clinic are barbaric, as well as duplicative, unnecessary, and dubious in their applicability to human injuries. They include the bashing in of baboons' heads, unsanitary operating conditions, and violations concerning cage size and ventilation. In fact, the Animal Plant Health Inspection Services of the USDA has cited 74 violations of the Animal Welfare Act in this laboratory.

I emphatically urge you to oppose this grant and I suggest that someone in your staff see the films which will be shown for Congress on May 3rd, pertaining to this subject.

I thank you for your time and would appreciate a reply.

LETTER FROM LISA V. KABLER

I am writing to strongly voice my opposition to the Gennarelli-Langfitt grant (no. NS.088803-13). I will not accept seeing one cent of my tax dollars supporting the gruesome bashing of baboons' heads at the Head Injury Clinic of the University of Pennsylvania. This act is not only utterly immoral, but has little application to human well-being.

Please submit this testimony to the hearing on grant applications in May. The idea that Dr. Gennarelli may recieve $1.5 million to continue this atrocity is positively disgraceful.

Sincerely,

Lisa V. Kabler

STATEMENT OF R. KARAS

I am greatly angered to learn that the most gruesome torture is being perpetrated on baboons at the Head Injury Clinic Laboratory of the University of Pennsylvania. The Animal Plant Health Inspection Services of the USDA has cited 74 violations of the Animal Welfare Act at this laboratory. These violations are related to ventilation problems and cage sizes and are not even concerning the inhumane research itself which injures the brains of conscious unanesthetized primates.

I am further outraged that Dr. Thomas Gennarelli of this Clinic has received a NIH grant filed under Thomas Langfitt of the University of Pennsylvania totaling $1 million annually for the past 13 years.

On May 3, 1985, a 20-minute film "Unnecessary Fuss" will be shown for Congress. It shows the cruel manner in which research is conducted with taxpayer money given under the Gennarelli-Langfitt grant. Please delegate one of your staff to view this film.

STATEMENT OF NICOLE O'CONNOR

This is to OPPOSE THE FUNDING of Grant Number NS 088803-13 filed by Thomas Langfitt and Dr. Thomas Gennarelli of the University of Pennsylvania.

I have recently seen the tapes taken by the researchers themselves at the Head Injury Clinic Laboratory where Dr. Gennarelli operates and urge you to view them on May 3, 1985, when they are made available to the Congress. These tapes show not only the gruesome bashing of baboons' heads but also researchers smoking while operating on a baboon, dropping a scalpel onto the floor, picking it up and continuing the operation, thus demonstrating examples of vivisection at its worst, no real preoccupation for post-surgical treatment since the subjects in any event cannot yield usable data because the shape of their heads and the constitution of their brains are very different from those of human beings.

Dr. Gennarelli's laboratory has been cited by the Animal Plant Health Inspection Services (APHIS) of the United States Department of Agriculture on 74 counts for violating the Animal Welfare Act. These citations concern cage sizes, ventilation problems, and the most elementary rules of hygiene and animal care, not the research itself which is inane in addition to being unprofessionally conducted.

Let it not be said that my tax dollars are being used for such a barbaric activity. Dr. Gennarelli's lab must be closed. I suggest that the money intended for this grant be applied, instead, to a vast and intensive program of drunk driving control for the PREVENTION OF HEAD INJURIES.

STATEMENT OF THE AMERICAN HEART ASSOCIATION

The American Heart Association is one of the Nation's largest voluntary health organizations, comprised of 55 affiliate organizations, over 12,000 local components and over 2 million fundraising and program volunteers. We are the only voluntary agency in the United States devoting all of its human and financial resources to this one goal: the reduction of premature death and disability due to cardiovascular disease. We are pleased to have this opportunity to provide the Subcommittee with our comments and funding recommendations for Federal programs pertaining to cardiovascular disease research and prevention.

Although our statement focuses on FY 1986 appropriations for the National Institutes of Health, we believe that FY 1985 funding issues must be resolved fully before consideration can be given to next year's funding. Therefore, we would like to comment on the Administration's order to limit the number of grants NIH can award in FY 1985 to 5,000 and to forward-fund 646 of those grants over the next three fiscal years before we comment on our FY 1986 funding recommendations. AHA believes that it was clearly the intent of Congress that NIH fund between 6,200 and 6,850 grants in FY 1985 and that the funds should be spent in FY 1985. Had it been the intent of Congress that these funds should be made available in subsequent years, it would have so indicated. AHA believes that there can be no compromise on this issue -- the 6,526 grant level for FY 1985 must be fully restored and the funds appropriated for these grants must be spent in FY 1985.

In recent years we have witnessed unparalleled declines in morbidity and mortality rates due to not only cardiovascular disease and stroke, but cancer, diabetes and many chronic and disabling diseases. There are many reasons for these encouraging trends: a greater stress on preventive medicine; a higher level of awareness and concern on the part of the general public regarding healthy lifestyles; but most importantly, remarkable research breakthroughs in all fields of biomedical research and the translation of these important findings into clinical practice. These research advances not only save lives and improve patients' medical treatment, but result in a significant savings of tax dollars as well. It has been estimated that for each dollar spent in biomedical research, there is a return of $10 to $16 in reduced illness and medical costs due to increased life expectancy.

The President's FY 1986 budget includes an unprecedented 6 percent decrease below the FY 1985 level for NIH's biomedical research programs, while a 12 percent increase has been recommended for government-wide research and development funding. For example, for the Department of Defense R&D program, a 22 percent increase has been requested, for the National Science Foundation, a 6.5 percent increase was requested, and for the Department of Energy's R&D programs, an 8 percent increase was requested. Certainly the NIH deserves the same high funding priority as these other research and development components of the Federal government.

Funding of NIH programs at the levels requested in the President's budget for FY 1986 would severely restrict the NIH's ability to take advantage of current scientific and technological opportunities. Therefore, we urge the Subcommittee to recommend for FY 1986 an overall increase of 13 percent over the FY 1985 funding level for the biomedical research programs of the National Institutes of Health.

The American Heart Association also wishes to emphasize to the Subcommittee that what is needed, more than anything else, is stabilization in the funding and flexibility in the program management of the National Institutes of Health. Recently, both Congress and OMB increasingly have become involved in the "micromanagement" of NIH. The AHA believes that while it is the obligation of Congress to set the overall priorities for the NIH and the directions that biomedical research should be taking in future years, ultimately it should be the NIH that makes specific program recommendations and funding decisions.

We would like to address FY 1986 appropriations for the National Institute of Neurological Disorders and Stroke, and comment on the biomedical research programs of the Stroke and Trauma Program of the Institute.

Cerebrovascular disease is the third leading cause of death and the leading cause of long-term disability in the United States. Of the 500,000 Americans who suffer stroke each year, some 160,000 die. Survivors of stroke number almost 2 million. These persons often face years of severe physical and mental impairment, emotional distress and overwhelming medical expenses. It is for these reasons that stroke is viewed by many as the most devastating of all human disabilities. It is also one of the most costly of all disabilities -- each year, stroke and its consequences cost this Nation over $11.3 billion.

Black Americans especially are susceptible to cerebrovascular disease. Black Americans are more likely than white Americans to suffer hypertension, a major risk factor for approximately 55 percent of all strokes. In fact, much of the progress made against stroke has come from advances in the diagnosis and treatment of hypertension. Unfortunately, for the other 45 percent of all strokes where no underlying cause can be singled out, more research is needed.

While stroke was once believed to be a hopeless disability, we are now on the verge of great discoveries with regard to the prevention of stroke and the rehabilitation of stroke victims. The identification of the major risk factors for stroke -- high blood pressure, atherosclerosis, high red blood cell count and diabetes -- has aided in preventing the occurrence of the disorder. Also, the identification of transient ischemic attacks (a series of "little strokes" that often precede major strokes) has allowed for the provision of prompt medical and surgical attention that may prevent a fatal or disabling stroke. Advances in treatment methods include new monitoring techniques -- telemetering and video methods -- for patients with stroke that allow us to study behavior and brain function; other continuous monitoring techniques, primarily positron emission tomography (PET) and nuclear magnetic resonance (NMR), provide vital information with regard to understanding and treating tissue damage caused by stroke; and new treatment methods have been developed that can be administered immediately after a stroke with the aim of minimizing its effects.

Because of these accomplishments and developments, progress against cerebrovascular disease in recent years has been tremendous. Since 1968, the age-adjusted death rate due to stroke for whites and non-whites has declined by 53 percent and 36 percent, respectively. When compared to the death rate from all other disease -- 13 percent -- it is highly evident that the rapid progress against stroke is unique in medicine.

The NINCDS is the Federal focal point for all research involving neurological and other brain disorders, including stroke. The gains in neuroscience -- an increasingly sophisticated understanding of the development, maintenance and functioning of the basic elements of all nervous tissue -- have all been made possible by the excellent programs of the NINCDS. Because it is now generally accepted that the brain's complex functions -- and dysfunctions -- are all explicable on the basis of the properties of nerve cells and their supporting elements, NINCDS has made the support of basic neurological research its number one priority.

What is interesting to note with regard to the ability of NINCDS to fund necessary neurological research, is that its budget is approximately 7.7 percent of the total NIH budget, while the Institute funds 11.6 percent of the total research project applications funded by NIH. This gap is expected to widen further in future years as well because of the present knowledge explosion in the neurological sciences.

The NINCDS Stroke and Trauma Program administers basic, applied and clinical research investigations, including multidisciplinary research centers for cerebrovascular disease. The Stroke Program's areas of research and research training are primarily: cerebrovascular circulation (including stroke and vascular disorders and studies of prevalence, epidemiology, prevention, diagnosis, therapy and rehabilitation); degeneration and regeneration of damaged brain nerves; transplantation of tissue of the nervous system; and the study of PET, NMR, and other imaging techniques, including assessment of research techniques for their clinical and diagnostic potential.

We are extremely concerned because the President's budget includes only $374 million for NINCDS for FY 1986. This is a 5.8 percent reduction from the 1985 funding level of $396.9 million. With regard to NINCDS support for cerebrovascular research and research training in FY 1985 the level of support is $29.3 million; under the President's proposed FY 1986 budget, only $24.3 million is allocated for this purpose. This constitutes a 17 percent reduction in stroke research support at a time when the opportunity for advancement in this area is so great. The impact of the President's budget on the Institute as a whole is as follows:

o Only 630 new and competing research grants will be funded, compared with 785 in FY 1985.

o Funding for individual and institutional training awards will be held at the FY 1985 level.

o Only a total of 33 center grants are expected to be paid in FY 1986, compared with 38 centers in FY 1984 and 40 centers in FY 1985. Additional discussion regarding stroke centers is provided below.

o Only grants with priority scores of 150 and lower are expected to be approved and the Institute's award rate is expected to be only 26 - 27 percent.

o Intramural research and research support activities will both be reduced by 6 percent from their FY 1985 levels.

AHA particularly is concerned about the need for expansion of the Institute's stroke research centers program. In FY 1985, NINCDS planned to add two new stroke centers, however, these awards have not yet been made. We understand that NINCDS has approved for funding two excellent stroke center grant applications but neither has received funding because of the President's FY 1985 grant-reduction order. Furthermore, NINCDS has done nothing with regard to soliciting applications for the stroke demonstration units because of the financial uncertainty facing the Institute in FY 1985 and FY 1986. We urge the Committee to provide the NINCDS with sufficient funds in FY 1986 so that it may pursue the expansion of its stroke centers program as Congress originally intended.

In summary, we urge the Committee to provide an appropriation of $448.5 million for the NINCDS in FY 1986. This constitutes an increase of 13 percent over the FY 1985 appropriation level and it is in keeping with proposed increases for other Federal research and development programs. An appropriation of this amount will begin to help the NINCDS meet its goal of funding 50 percent of its approved research grant applications.

Animal Resources Program

The Animal Resources Program (ARP), housed in NIH's Division of Research Resources (DRR), is responsible for supporting research projects that enable scientists to obtain and use animals effectively in health-related research. The President has proposed an outrageous 14 percent decrease in funding for DRR for FY 1986. The AHA is very concerned because such a decrease in funding would erase completely increases gained in DRR funding last year.

The DRR's laboratory animal program originally was to support 46 research centers in FY 1985, but this number was reduced to 44 under the revised budget for FY 1985. And, although 44 centers are slated to be funded in FY 1986, funding for this program is proposed to be reduced by $7.1 million. Furthermore, while $7.4 million was to be made available for improvements to institutional laboratory animal facilities in FY 1985, the number was reduced to $5 million and no funding has been included in the FY 1986 budget for this purpose. At a time when investigators continue to be concerned about providing the best possible care to research animals, it is essential that funding for laboratory animal facilities be included in the DRR's FY 1986 budget.

AHA strongly believes that the ARP program deserves a high priority for funding in FY 1986. The President's budget proposals for the DRR's animal program are highly out of line with its current needs. AHA recommends that DRR receive a 13 percent increase, or $343.5 million, in FY 1986.

Animal facilities and properly trained animal medicine personnel are a necessary aspect of all biomedical research activities. Furthermore, proper facilities and healthy animals help to ensure reliable research results. Our recommended 13 percent increase in DRR funding will only begin to meet the need for improving the wide-spread deterioration that currently exists in a majority of the research animal facilities throughout the U.S.

STATEMENT OF AVI MAGIDOFF

I am submitting this testimony for the record in order to document a public mode of thinking in opposition to granting public funds to Dr. Gennarelli and/or the Head Injury Clinic Laboratory at the University of Pennsylvania.

I have seen tapes of the research which Dr. Gennarelli conducts, as well as have observed people's reactions at watching those tapes. The tapes are definitely the goriest thing I have ever seen.

However, I do not wish to concentrate on gore, nor do I wish to discuss the scientific (in)validity of the research. Both these points will, I am sure, be discussed at length in open hearings.

I do wish to point out that any appropriations committee's duty is to evaluate cost effectiveness of resources spent. Had Dr. Gennarelli's grant application specified a billion dollars, the subcommittee would recommend the rejection of his application on the grounds that his proposed effected results do not justify the cost. Dr. Gennarelli is expending something much more valuable than dollars. He is expending life. An individual life which is the most precious thing there is. We must not lightly appropriate moneys that destroy it.

Of course it may be argued that other research expends life too. as a member of the general public not much information is available to me on the going-ons in biomedical laboratories. It is quite conceivable that Dr. Gennarelli's research is typical in its disregard to life. However, the evidence in this case is conclusive and shows that grant number NS.088801-13 was definitely spent in a gruesome, inhumane and unjustifiable manner. Which is why anyone who has seen the evidence will oppose the funneling of even one cent of one's tax moneys to Dr. Gennarelli.

I urge all members of the subcommittee to view the evidence (available through the People for the Ethical Treatment of Animals, and now the USDA also) before markups.

STATEMENT OF LYNNE SHERBONDY

Dr. Thomas Gennarelli of the Head Injury Clinic Laboratory at the University of Pennsylvania is applying for funding (number NS.088803-13, filed under Thomas Langfitt of the University of Pennsylvania). I urge you and your staff to see the films taken by the researchers themselves to be shown before Congress on May 3rd. The films (condensed into a 20 minute version by the animal rights community, entitled "Unnecessary Fuss") show not only gruesome bashing of baboons' heads but also researchers smoking while operating on a baboon, dropping a scalpel on the floor and picking it up to resume the operation. The Head Injury Clinic Laboratory is vivisection at its worst. And Dr. Gennarelli is applying to renew his NIH grant, to receive $1.5 million tax dollars to torture more baboons -- a torture that fails to suggest any applicability to human injuries.

I urge you to oppose this funding and to end this cruel and needless abuse.

One final note, the Animal Plant Health Services of the USDA has recently cited 74 violations of the Animal Welfare Act at this laboratory.

STATEMENT OF CYNTHIA GARAFOLA

I am unquestionably opposed to any funding of Dr. Gennarelli and the Head Injury Clinical Research Center (HICRC) at the University of Pennsylvania.

The film Unnecessary Fuss, collated by PETA-People for the Ethical Treatment of Animals, from video tapes taken by the researchers themselves at the (HICRC), shows not only the gruesome bashing of heads of unanesthetized baboons, but also unsterile surgery. Researchers smoke while operating on a baboon. One researcher drops a scapel then picks it up to continue operating with it.

After the researchers bash the baboon's head, which is encased in a cement helmet, they invalidate the scientific accuracy of this experiment by removing the helmet with a hammer and screwdriver. According to PETA, hammering can interfere with measurements of ICP - intra-cranial-pressure - measurements that are vital to this experiment.

Baboon skulls are not the same shape as human skulls. Therefore, I feel that the results from these experiments on baboons cannot be extrapolated to predict with scientific accuracy what the results would be on humans.

I am outraged that my tax dollars support this torture and atrocity. Dr. Gennarelli's Head Injury Clinical Research Center is nothing more than a modern-day concentration camp.

STATEMENT OF CLAUDETTE L. KIELY, WESTERN MASSACHUSETTS COORDINATOR, MASSACHUSETTS CHAPTER, NATIONAL NEUROFIBROMATOSIS FOUNDATION

Mr. Chairman and Members of the Subcommittee, my name is Claudette L. Kiely. I am the Western Massachusetts Coordinator of the Massachusetts Chapter of the National Neurofibromatosis Foundation and a doctoral candidate in the Humanistic

Psychological Education concentration in the School of Education, University of Massachusetts at Amherst.

I have come today joining these distinguished panelists to share with you our family's neurofibromatosis story of 27 years of marriage and our five special young adult children, ages 21-25. My husband and four of our five children have neurofibromatosis, a genetic condition that causes tumors to grow on the nerves anywhere in the body at any time. Two of our children are more severely affected than the other members.

Perhaps you saw the NBC "St. Elsewhere" television episodes that protrayed a young woman with severe manifestations of NF on her face. My oldest son and I watched the first episode together. Our mutually shared experiences over his lifetime made us two of the toughest critics of the program. We could and did identify with much of the script; we've lived it!

Prior to our marriage, my husband and I went to a reputable New England clinic to seek a diagnosis of an apparent skin condition of birth marks and tiny nodules that he had had for many years. This condition had gone undiagnosed by Navy physicians prior to his discharge in 1954. Our concerns about the condition centered in the fact that we had planned a large family and had discussed that the condition may become worse if unattended but more; that it may be hereditary.

At his clinic, two growths were biopsied, permitting the physician to make an accurate diagnosis, neurofibromatosis. However, he inaccurately informed us that this disorder was not hereditary and therefore, assured us that we could feel free to pursue our dream of the large family that we had planned.

We married in August, 1958 and our first son, John, was born to us in November, 1959. I noted a tiny mark on my infant son's cheek that resembled those of my husband's skin, called café au lait marks. The pediatrician quickly assured me that the mark on my son in no way related to those of my husband; that this was simply a common birth mark that would fade in time.

Our fifth child was born the day prior to our first child's fourth birthday. Months prior to this delivery, I noted that not only had my son's facial birth mark not faded but rather, it had increased in size. In addition, I noted other areas of pigmentation were becoming visible on his torso, tiny marks the size of freckles.

John's teething process was normal with the exception that one area of the jaw remained void of teeth and caused me increased concerns as well. The pediatrician insisted that this was simply a "hard cutting tooth" and nothing about which to be concerned. The pathology reports of the biopsy surgery, performed by an oral surgeon at the age of four, revealed that our son's "hard cutting tooth" was in actuality, malignant tumorous growth caused by NF.

Three months after the birth of our last child, the oral surgeon, who had been consulting with surgeons across the country about our son, enlisted neurologists to examine our other four children. It was then we learned that four of our five children had NF, including our three month old infant daughter.

While the previous misdiagnosis by the pediatrician as well as the misinformation given us at the clinic about the heredity factors of NF occurred between the years of 1958-1963, it is not an uncommon experience today for those affected by NF to be misinformed by physicians. I have spoken with many parents who in the 80's have experienced medical ignorance about NF. There is ample evidence of the need to better educate the entire medical community about NF and other neurological and genetic disorders to enable every physician to make an early and accurate diagnosis.

Following biopsy surgery at the age of four, John's entire lower mandible, his jaw bone, was removed in two surgical procedures. In the course of John's young life to the present age of 25, he has undergone a total of six operations to control NF in both the mandible and the face. During his teen years, tumorous growth was cut from his cheek and chin, removing a tumor the size of an egg that protruded in a bulbous mass, deforming his face. At age 23, additional neurofibromatous tissue was removed from his severely deformed cheek and chin once again. Reconstructive surgery, including hip bone transplant to the jaw, began in 1983.

Direct and indirect medical costs in 1983 for John's two operations amounted to approximately $45,000; $10,000 out-of-pocket that included lost work time, travel costs, outpatient care not covered by insurance, etc. Outpatient care at Children's Hospital began in 1981 and has extended to the present time, including both Craniofacial and Dental Clinics.

John has been without lower teeth since the age of four with the exception of three second teeth that appeared at the back left area of his jaw. These three teeth provided the hope of one day fitting a lower denture that would use these teeth as pivots to which the denture could be affixed.

The first attempt to fit a denture failed; the denture costing $500+ in addition to the cost of extensive travel for multiple fittings. The second denture that has taken over 1-1/ 2 years of design and re-design is billed at $2,500, plus the extensive travel for fittings added to dental clinic costs throughout the process. The three pivot teeth required special crowns to accomodate this denture; each at a cost of $500.

John earns approximately $14,000 annually. Obviously, he cannot afford his own medical care and his parent's involvement is ongoing for John, as it is for other family members, also into low income positions.

John worked his way through college, obtaining an Associates Degree. We, his parents, could provide him little financial assistance as we coped with high medical debt and family support.

The psychosocial burdens upon my son's young life have been enormous, as you can perceive. There was the taunting and cruelties of young children in elementary school who did not understand deformities. There have been the stares and probing questions of the curious who seemingly fail to understand where the invasion of privacy begins and ends. There have been the teen years with missed dances and proms without a date. There have been the internal processes and fears of the unknown, the unpredictable course that NF may take. There is the knowledge and experience that NF is vascular and excessive bleeding in surgery is a threat to life. John and I so well remember that hour, five days after surgery when he began to hemmorrhage and was coded. Later, he said, "Mom, I really thought I was going to die as the blood continued to pour from my mouth." yet, in spite of it all, John persists courageously in his battle against NF. The doctors have told us that John must undergo surgery every 6 - 7 years to remove additional neurofibromatous tissue in his cheek and chin.

I would like now to speak to you of our daughter, Lynn-Anne, age 21, the second most severely affected member of our family. Lynn-Anne was an outpatient at Shriners Hospital for Crippled Children, Springfield, Massachusetts from the age of 2 1/2 to 21. Lynn-Anne's condition included a bent tibia bone of the right leg and scoliosis, curvature of the spine. Her leg was braced as a preventive measure against fracture. If the leg had fractured, the doctors had told us, amputation would be necessary because there is no healing in diseased bone.

Lynn-Anne spent her ninth birthday in Shriner's, admitted for the purpose of surgically fusing the ankle bone to relieve the pressure on the leg that was thought to be causing severe pain.

If ever I lost faith in God and medicine, it was at this point. We had to grant permission to medicine to make our daughter a surgical cripple. What NF had not done, the scalpel would.

Just days prior to her scheduled surgery, the doctors had discovered the cause of the pain in her leg. Good bone marrow, unexplainable to medicine, had begun to replace the diseased and had simply been causing pressure on the normal fibula as it grew. This mother offered a seemingly simplistic explanation: the power of prayer of an entire family who had sat nightly for years in a circle, hand clasping hand, offering evening prayers for each and every family member. When medicine labels a condition "incurable" and admits to its technological limitations, what else does a family do?

Lynn-Anne's scoliosis was followed every three months throughout puberty, a time when this condition is known to advance rapidly. This did not happen and she was spared wearing a back brace. She has one leg that is 3/4" shorter than the other and one hip that is higher than the other causing an imbalance and slight limp.

A lovely looking young lady of 21 years, she lives with fears as she observes tumors appearing over her body together with multiple cafe-au-lait marks. Lynn-Anne has been delivered from her leg brace, she has been delivered from the prognosis of amputation of her leg, although physical exercise and activities must be limited. She has been spared from wearing a back brace and to date, from having any orthopedic surgery. Who will deliver her from this condition that she concludes must deny her to bear children, knowing the chances are 50/50 of having a child who will be affected by NF? More. she knows that pregnancy might well spell doom upon her already personally altered destiny.

Lynn-Anne also struggled with a learning disability throughout her life, also a common situation among those affected by NF. However, with many long hours of study, she has accomplished her goal of becoming a preschool teacher. Currently, she is doing well.

Our other two sons, Gerard and Donald, have a milder form of NF at this time. It is evident that Gerard's condition is now progressing as more and more tumors are in evidence on his torso and limbs. Donald's condition is specially mild which includes only a few cafe-au-lait marks and a lesser number of small tumors.

My husband has had over 30 tumors removed from his body and multiple tumors remain. New ones continue to appear.

What will become of John, Gerard, Donald and Lynn-Anne? No one knows. No one knows when the silent timebomb will detonate, where it may explode next in our lives or if it will. Our odds have not been great to date, but nonetheless, far better than many Americans who experience more extreme severities of this neurological genetic disorder, NF, as well as multiple other neurological disorders that deny the quality of life of their host.

In our home, we have learned to live with realities, to meet crises, and to cope with our human condition. The all-American dream of the 50's is long behind us now. The myths have been exploded.

Even the dream of grandchildren hangs in the balance as our children one by one, discuss and decide the pros and cons of childbearing against the 50/50 chance of perpetuating this disorder. They have the advantage of knowledge that their parents were denied.

I regret that I did not know this Committee was here, prepared and able to help not only my children but thousands of others as well. Had I come to you sooner, we might have begun earlier. But I was in isolation for 24 years, never having met another person who had NF or who knew of NF outside the medical community. I was just trying to keep us afloat; unaware that perhaps my government could and would help.

I trust that since others have come to you and as I have come to you today to describe the multiple implications of this devastating disorder, neurofibromatosis, that you can understand why we urge you to stand solidly opposed to any budget cuts that would, in any way, impede or limit biomedical research which can unlock the secrets of genetic and neurological disorders that will free my young adult children.

It is the courage, the strength, the patience, the persistence, the perserverance of our children that permit me to stand proud before you today. I can tell you openly, neither my family nor I want your pity.

We do want you to hear, to understand, to appreciate the fact that we need you. We need you to recognize that we are among the more than 100,000 Americans who live with NF, the silent timebomb, unknowing when it will detonate. We need you to work supportively with NINCDS, the leading NIH institute providing basic bio-medical research in the phakomatoses group of which neurofibromatosis is the most common.

We need you to provide the necessary appropriations to enable our common goals of finding the cause and cure of NF and the other neurological genetic disorders that affect over 50 million Americans. Behind these 50 million Americans are families who look to you for help for their loved ones just as I've come to you today with my own personal story.

STATEMENT OF RAYMOND A. CONNORS, PRESIDENT, TUBEROUS SCLEROSIS ASSOCIATION OF AMERICA

My name is Raymond A. Connors, a Founding Director and President of the Tuberous Sclerosis Association of America (TSAA), and the parent of a child severely afflicted with Tuberous Sclerosis (TS).

We are happy to be here today and thank you for the opportunity to be heard. As you know, Tuberous Sclerosis is a serious inherited disorder that may result in severe mental retardation, epilepsy, multiple physical handicaps, tumors in any vital organ and characteristic skin abnormalities. Recent studies have indicated that the prevalence of TS is greater than 1:5,000 people. It is believed that many additional individuals have this disorder with minimal manifestations. Nevertheless, these mildly affected individuals can pass on a severe form of this disease to their children.

In past years, the TSAA has made specific requests to this Committee directed toward Tuberous Sclerosis research. We would like to capsule our progress.

The first Tuberous Sclerosis Research Workshop, which was held on April 13, 1984, and co-sponsored by NINCDS and TSAA, was enthusiastically received by approximately 140 attendees. Many other leading scientists and clinicians who were unable to attend in person have since requested copies of the proceedings of the Workshop.

The TS research community is excited about the Workshop for it has identified a number of promising research directions which are fully feasible at this point in time subject to available funding. Material from the Workshop is coming close to publication. The publication of that effort will provide new impetus to the researchers who were involved in the Workshop, as well as others (worldwide) who were unable to attend. Another benefit of such publication will be an increase in public awareness of Tuberous Sclerosis.

Following the Workshop, a letter was sent to leading investigators in Tuberous Sclerosis and related fields inviting them to participate as members of the TSAA Scientific Advisory Board (copy attached). The Advisory Board will participate in an ongoing review and development of approaches to the diagnosis, management, treatment and prevention of this disease. The letter was enthusiastically received; we have attached a list of the members on this important Board.

Dr. H. Frederick Bowman of the Harvard-M.I.T. Division of Health Sciences & Technology and Dr. Edgar Y. Oppenheimer, Professor in Pediatrics and Neurology at Boston University School of Medicine, Co-Directors of the TS Research Workshop, have been working together to establish the groundwork for the National Case Registry and for the development of a Multiproject Consortium Research Application in the basic science of Tuberous Sclerosis.

It became very apparent during the recent Research Workshop that many of the basic scientific tools which are needed to carry out investigations of the basic mechanisms in TS are available and have already been applied to other neurological diseases. Our immediate goal therefore is to apply these existing techniques to TS.

In order to accomplish this goal, case material must be made readily available to the research scientists and to clinicians. In this regard, it was the consensus of the Workshop that the establishment of a National Tuberous Sclerosis Registry should be given highest priority.

We feel that a National Case Registry should be established in conjunction with TSAA. The cost of initiating and running a viable TS case Registry program is estimated to be approximately $250,000 for the first year. This cost includes correspondence with tens of thousands of physicians and health care providers who may be in contact with individuals with TS. Ethical concerns such as informed consent, confidentiality and access to the information in the Case Registry are being addressed.

Following the establishment of the Case Registry, Doctors Bowman and Oppenheimer plan to develop a Multiproject Consortium Research Application in order to facilitate the conduct of basic science research in TS. The multiproject application will include a Clinical Core which will serve to gather clinical specimens for study by the various basic science research investigators (pathologists, biochemists, cellular and molecular biologists and clinical and biochemical geneticists). The TSAA Scientific Advisory Board will be used as resource individuals in the development of the Clinical Core. This is the first step in gathering the prerequisite expertise for the Multiproject Consortium effort.

Investigators in the Clinical Core will make extensive use of the

Case Registry to obtain clinical materials. Adequate facilities to coordinate the activities of the Clinical Core such as preserving and disseminating tissue specimens for evaluations are needed. A conservative estimate of the cost of mounting the multidisciplinary consortium, including the Clinical Core, is approximately $1,300,000 per annum. This funding would pay for the Clinical Core, as well as fund 6-8 separate basic science research projects.

The total amount of support which we feel is needed to set up a Case Registry and to effectively utilize and mobilize existing investigators conducting relevant research is 1½ to 2 million dollars per year.

We have learned from the Research Workshop that there is widespread interest in TS among scientific investigators of highest quality. We now exist in a unique point in time where there is both a developing momentum and a confluence of interest among investigators from different disciplines, health care providers and Members of Congress. We want to build on this momentum and continue our work.

We are appalled by the decrease in the NIH/NINCDS budget that is proposed by the Administration. The impact on the number of research trainees NINCDS could support would be devastating. Future research is dependent upon the training of young researchers and we must keep this an uncompromised priority.

A small budget increase over the annual rate of inflation would permit NINCDS to maintain its current research efforts while affording new and promising initiatives (like Tuberous Sclerosis) the opportunity to seek and gain funding through HHS/NIH/NINCDS.

Finally, we feel it is our duty to leave this Committee with the following thoughts constantly conveyed to our office by the membership:

"We are sick of hearing it said TS is rare. Tuberous Sclerosis is not rare! In world populations, Tuberous Sclerosis is one of the most common genetic disorders. Tuberous Sclerosis is ten to twenty times more common than Muscular Dystrophy, Huntington's Disease, Tay Sachs, Sickle Cell Disease and many other highly promoted and publicized disorders.

Tuberous Sclerosis families throughout the United States watch their offsprings suffer and die from this disorder. Tuberous Sclerosis parents endure great anguish for the rest of their lives when they learn that somehow, without knowing it, they have transmitted this dreadful disease to their children. Marriages are destroyed. Parents have turned to drugs and alcohol and even suicide because they feel their plight is hopeless."

When they are told there is no treatment for the disease Tuberous Sclerosis, TS people ask, "Why doesn't our government help us like they do heart, cancer and many other diseases and disorders?" They tell us to come here and "remind Congress of the principles of democracy, equity and equality on which our country was founded". They tell us "Tuberous Sclerosis families pay their fair share of taxes and that we must demand and expect to receive a fair share of federally funded research programs, regardless of funding levels".

We know this Committee recognizes the frustration such remarks reflect. We also know that this Committee has been most supportive, courteous and helpful to those of us who have come here to plead the cause of Tuberous Sclerosis for our constituency. We believe you understand how difficult it is for us to explain why some are fed like lions while others less than ants. The truth is we have never been able to offer a justifiable explanation as to why a few diseases/disorders get virtually all the money while the rest are simply herded together at the bottom of the funding ladder or by-passed completely. The TSAA is a conduit to carry the messages of hope and despair for those suffering from this horrible affliction. Their despair is reflected in the aforementioned remarks. Their hope is reflected in the totality of this text. Ultimately, the only hope is in RESEARCH.

PLEASE .... PLEASE HELP US TO HELP TUBEROUS SCLEROSIS.

Again, and most sincerely, we Thank You.

SUMMARY

The following recommendations are requested by the Tuberous Sclerosis Association of America (TSAA) to add to present NIH/NINCDS activities:

1. That a budget increase over the annual rate of inflation be allocated to NIH/NINCDS.
2. That a minimum of $250,000.00 be allocated for the establishment of a National Tuberous Sclerosis Registry.
3. That a minimum of 1.5 million dollars per annum be allocated for the development of a Tuberous Sclerosis Multiproject Consortium Research Application in order to facilitate the conduct of basic science research in TS.
4. That the Tuberous Sclerosis Assn. of America (TSAA), when appropriate, be an active participant of any effort(s) initiated by this Committee on behalf of Tuberous Sclerosis.

May 14, 1984

Dear Dr. :

On behalf of the TSAA, I want to take this opportunity to thank you for your participation in the Tuberous Sclerosis (TS) Research Workshop sponsored by NIH and TSAA which was held on April 13, 1984, at MIT. As you are aware, Workshop participants were selected on the basis of their involvement with TS, the relevance of their research interests, and their willingness to serve.

A major objective of the Workshop and indeed of the TSAA is the development of an interdisciplinary community of scholars, the collective talents of which can be brought to bear on this genetic disorder. The Directors of the Workshop recognized the importance of the mutual education of those with clinical observations of TS and those highly skilled in state-of-the-art investigational techniques. The momentum generated by the Workshop must not be lost.

One of the principal objectives of the TSAA has been to advocate at the Federal level in support of marshalling resources (human and financial) to promote Tuberous Sclerosis research. Our agency has spent many years developing visibility for TS within the formal structure of HHS (Health and Human Services)/NIH and the legislative bodies that authorize PHS research budgets. Some of the positive results of this sustained legislative pursuit include: the NINCDS Fact Sheet on Tuberous Sclerosis (1978); the NINCDS Report on Tuberous Sclerosis (January, 1982); and the Tuberosis Sclerosis Research Workshop just held. I trust you will agree that much remains to be done.

Because of your known commitment to Tuberous Sclerosis, we wish to invite you to join the TSAA Scientific Advisory Group. Objectives of the Group include the identification of relevant research directions and coordinated lobbying on behalf of families and victims of TS. We would like to include your expertise and talent and ask you to join your voice with ours in seeking to expand opportunities for funded research in TS. The TSAA is a federally recognized National Health Agency incorporated in the Commonwealth of Massachusetts. Its Board of Directors consists of parents, community leaders, business people, and politicians. It retains legal counsel and is audited regularly by Certified Public Accountants in accordance with the Standards of Accounting and Reporting for Voluntary Health and Welfare Organizations.

Members of the Tuberous Sclerosis Scientific Advisory Group are not burdened by administrative concerns, but rather are free to follow those pursuits designed to enhance their clinical and/or research interests. We hope that you would be willing, for example, to participate from time to time in preparing testimony for appropriate House and Senate Congressional Committees in behalf of TS in general, but more particularly with respect to the specific value of your own research interest(s) in furthering the understanding and management of TS.

We see no conflict of interest in your serving the cause of Tuberous Sclerosis in this way while continuing affiliation(s) with any other group or agencies.

While I know you are very busy, I hope you will be willing to serve in this advisory capacity. I look forward to your early reply.

With kind regards,

Raymond A. Connors
President

TUBEROUS SCLEROSIS SCIENTIFIC ADVISORY BOARD

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STATEMENT OF FRANCES ACKERMAN

I urge that you oppose any further funding of the Gennarelli-Langfitt NIH grant No. NS. 088803–13, filed under Thomas Langfitt of the University of Pennsylvania. I am referring to the Head Injury Clinic Laboratory at the University of Pennsylvania.

The violations being performed at this laboratory warrants a long overdue investigation. These are cruel and unscientific experiments. Will welcome the decision of the Appropriations Committee.

LETTER FROM JAMES J. DIPUPPO

I am writing in opposition to the Gennarelli-Langfitt grant. I believe that tortue is torture—whoever is receiving it. I am specifically referring to the 74 violations of the Animal Welfare Act at the University of Pennsylvania laboratory as cited by the Animal Plant Health Inspection Services of the USDA. The citations concern inadequate cage sizes and ventilation. I am also specifically referring to the cruelty to animals evidenced in the videotapes known as the Gennarelli tapes in which are shown the bashing of baboon's heads in the name of science.

I expect that your will deny Drs. Gennarelli and Langfitt their grant. I like to believe the best about our American civiliation. Thank you.

JAMES J. DIPUPPO.

STATEMENT OF ANNA CONTI

I am opposed to the Gennarelli-Langfitt grant (NS 088803–13). Dr. Gennarelli does not have the right to brutally maim and destroy live, healthy creatures for the sake of collecting scientific data. It is barbarous, especially when information can be gotten by alternative methods. Never had I envisioned science in the United States as taking such cruel, wanton liberties with life, albeit another species.

As to the question of accountability—in 10 years of funding, what vast body of knowledge has Dr. Gennarelli come up with? How has the medical community profited by his experiments? (I'd rather call them sacrifices).

I strongly oppose the entrenchment of vivisectionists in the scientific community and the breeding of animals for purposes of such extreme abuses as the above. I deplore the existence of an industry that manufactures diabolical restraints to hold fast a helpless, vulnerable creature in a steel grip that precedes torture. It is an abomination, and to realize that this practice is rampant in this Nation truly sears into my consciousness.

Please have the human decency to succor and defend the simple creatures, do not provide a federally funded treadmill for their annihilation.

LETTER FROM LYNN METRULIS

APRIL 30, 1985.

I am writing to convey my personal indignation and vehement opposition to Federal funding of the Head Injury Clinic at the University of Pennsylvania. I recently viewed the "Unnecessary Fuss" video and wish to formally object to the callous, reprehensible nature of the Gennarelli-Langfitt research, masquerading under the name science.

It is undeniable that the resources now allocated by Federal agencies in this area could do human health a far greater service were they channelled into presently available measures, requiring no further research, such as automobile airbags or legislation against violent sports like boxing, rather than the costly collection of more and more data on baboon trauma.

Dr. Langfitt contends that the work at the head injury clinic is nearing the threshold of some major discovery in human head trauma, while Gennarelli himself has stated that the project is not designed to test cures or develop preventative measures, but rather, to develop an animal model to create injury.

Furthermore, it is my hope that you will recognize the inverted criminal justice applying in this case. Rather than justice being brought to bear on Langfitt and Gennarelli, as well as the university administrators who are so arrogantly defending the research, we have legal action being taken against the people involved in exposing this utter nonsense to the public who picks up the tab. I should think the University of Pennsylvania would be mortified over the situation at their veterinary school. Instead, with the fervent allegiance of the Philadelphia district attorney—a University of Pennsylvania alumnus—they are quite secure in their corruption. This is a travesty of all that justice stands for.

Also a mutation of justice is the fact that the general public is subject to one set of standards regarding cruelty to animals and is held accountable when breaches occur, whereas accolades are heaped upon the practitioners of institutionalized perversity because they operate behind the veil of respectability.

Finally, while Congress may not wish to uphold the strictures of the Wild Horse Act of 1972, and it may consider H.R. 1145—the Information Dissemination and Research Accountability Act—too radical a constraint on medical researchers' freedom to engage in sadism, surely it cannot condone the illegal activities (the USDA cited no less than 74 violations of the Animal Welfare Act at the head injury clinic) of sorely demented individuals such as Gennarelli and Langfitt.

We cannot tolerate the willful subjugation (read: torture) of living beings for profit, curiosity, or in this particular instance—fun. I most sincerely hope that the committee will exercise its influence in correcting this gross abomination of rational scientific investigation and cease promtply all funding to the University of Pennsylvania Head Injury Clinic.

Thank you for your kind attention and consideration in this matter.

Respectfully,

LYNN METRULIS.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

STATEMENT OF JACQUELINE BELLANTI, CHAIR, NATIONAL COALITION ON IMMUNE SYSTEMS DISORDERS

PREPARED STATEMENT

Senator WEICKER. Our next witness is Jacqueline Bellanti.

Ms. BELLANTI. Good morning.

Senator WEICKER. How are you?

Ms. BELLANTI. Fine, thank you.

At the outset, I would like the record to show I have submitted written testimony, but in light of the conversations that you and the good doctor have just had, I think perhaps I might divert from my written testimony and give you perhaps an insight into the coalition that I represent and perhaps also why the emphasis on immunology is so great for the future.

Senator WEICKER. Your statement in its entirety will be included in the record. You go right ahead.

Ms. BELLANTI. Thank you very much.

[The statement follows:]

STATEMENT OF JACQUELINE BELLANTI

My name is Jacqueline Bellanti, Chair of the National Coalition on Immune System Disorders (NCISD). This organization was formed in 1983 with the 10 original steering committee members composed of voluntary and professional health organizations including the Immune Deficiency Foundation, Lupus Foundation of America, Arthritis Foundation, American Academy of Allergy and Immunology, National Multiple Sclerosis Society, Gay Right National Lobby, National Association of Area Agencies on the Aging, American Diabetes Association, Terri Gotthelf Lupus Research Institute, and the Asthma and Allergy Foundation of America. This diverse group of organizations representing multiple diseases and disorders has one common bond - the human immune system and the science of immunology. The membership of this organization will expand within this year to include other organizations but the theme of the science of immunology and interest in the research in the immune system will remain constant. First and most important, I would like to thank you Mr. Chairman and your Committee for your outstanding support and strong commitment to the research endeavors in the field of immunology. It has been through your Committee's strong language over the last three years that the immunology research initiative has flourished and has been expanded with an average 10% increase per year.

Mission Statement

Research and clinical endeavors clearly demonstrate that a wide variety of diseases, disorders and infections are caused by infectious agents and deficiencies or defects in the human immune system - the body's defense against invasion. Research on the immune system has the potential for preventing, treating, and possibly curing a wide variety of diseases such as diabetes, lupus, rheumatoid arthritis, asthma, various allergies, diseases of the lung, cystic fibrosis, immune deficiency diseases (e.g. agammaglobulinemia, AIDS). This research has a profound potential for affecting the health and quality of life for millions of Americans. The National Coalition on Immune System Disorders was formed to promote and coordinate a broad spectrum of organizations interested in biomedical research on and treatment of immune system disorders and to speak with a single voice on this issue. The mission of the Coalition is (1) to focus the attention of Congress, The Administration and the general public on the kind and nature of diseases and disorders affecting the human immune system as well as the justification of the need for research and services related to that system and appropriate levels of Federal funding to meet those needs; (2) to establish a mechanism for general liaison among the interested voluntary health agencies, professional associations, and advocacy groups to discuss their common interests and share information; and (3) to promote and encourage the coordination of immunologic and infectious disease research efforts including the exchange of research and service information between the organizations and the NIH and other federal agencies.

Immune System

The immune system is the body's defense against infection and, when functioning properly, contributes to the total well-being by fighting infectious agents, bacteria and viruses. When, however, this complex system malfunctions, numerous pathologic conditions including allergies, asthma, immune deficiency diseases (agammaglobulinema, AIDS), autoimmune diseases, arthritis, lupus, diseases and disorders of the lung and heart, diabetes, multiple sclerosis as well as other numerous disease entities occur. Recent research efforts in basic and clinical immunology have put us on the threshold of discovering new insights in the mechanisms of this complex system which can lead to not only improved methods of diagnosis and treatment but conceivably curing some of these disorders of the immune system. This Committee is to be commended for its strong support and commitment to the research endeavors in immunology because for millions of people who suffer from these disorders, this commitment to research in immunology offers hope for their future.

The National Coalition on Immune System Disorders is appealing today with one voice to expand the immunology initiative begun in 1984 by this Committee to the degree where research efforts may afford a breakthrough for the cure for many disorders of the immune system. Expansion of the research initiative will allow:

- continuation of the research efforts in the mechanisms of the immune system (relationship between monoclonal antibodies and multiple sclerosis, arthritis and lupus);
- continued research to develop a vaccine for AIDS (research efforts have identified the causal agent as HTLV-III with test now available);
- research in heart, lung and vascular disorders with particular emphasis on Kawasaki Disease, growing in large numbers especially in children (Rheumatic heart disease now is believed to be caused by an

exaggerated response of the immune system to streptococcal infection);

- expansion of research in the developing immune system in infants and children (the susceptibility of the developing infant to infection is related to the immature immune system and more research is needed to elucidate both cellular and humoral mechanisms of the defense system to answer why they are more vulnerable);
- expand research on autoimmune diseases such as lupus and rheumatoid arthritis;
- continue efforts in control and cure of asthma and allergic disorders;
- provide advances in field of neurosciences, especially degenerative diseases (e.g. Alzheimer's) and diseases of aging with increased knowledge of nerve cell dysfunction;
- understand genetically controlled embryonic development to reduce birth defects and inherited immune system dysfunction (agammaglobulinemia);
- understand mechanisms underlying age related changes in immune function both cellular and humoral components as well as the nature of the aging immune system and its response to infection;
- application of immunology techniques to the study and treatment of diabetes;
- expand molecular genetics research for identification, isolation and characterization of the genes that regulate the immune system.

These are but a few examples where research on the immune system will lead directly toward improved health care.

National Institutes of Health

Immunology is one of the broadest areas of research supported by the National Institutes of Health and spans all the Institutes. The Coalition is a member of the Ad Hoc Group for Medical Research Funding and endorses the recommendations of the group with particular emphasis on the following:

- provide funds sufficient to support 6,500 new and competing research grants. This is necessary to conduct the research needed to create breathroughs and cures;
- increase research training to 10,154; a modest increase to keep the immunology initiative active with new investigators;
- continue major clinical trials to translate the research findings to patient care activities;
- maintain levels for the remainder of the research programs to meet current services levels as set forth in FY 85.

Congressional Initiatives

This Committee has demonstrated its support of research in immunology by creating the immunology initiative in 1984 and to further expand this initiative, the National Coalition on Immune System Disorders requests report language to include the following:

1) An updated report on immunology research in Public Health services be made available to the Committee before the budget hearing next year and that this report reflect the strategies for accelerating the application of basic research in immunology to direct patient care and disease prevention. This report should include:

a) Progress made in each Institute and Division of Research Resources as stated as Institute priorities in the REPORT ON IMMUNOLOGY RESEARCH of Feb. 84 (p 23) and any new priorities cited since the submission of that report;

b) Inclusion of ADAMHA, CDC, FDA, DOD, USDA and VETERANS ADMINISTRATION in the report with regards to their activities and priorities in immunologic research (both basic and clinical research in immune system disorders);

c) Update on appropriate funding levels for FY 85, 86, and (87).

2) In addition, in the light of the February 1984 REPORT ON IMMUNOLOGY RESEARCH which documents immunology research at NIH, the Coalition urges the Committee to request report language to call for an "NIH working conference" to bring scientific experts and practicing physicians in basic and clinical immunology together to establish a research agenda for collaborative research endeavors and to establish priorities and new directives for research and training in basic and clinical immunology. A report should emanate from the conference summarizing these opportunities to address the problems of the immune system and how to accelerate the application of research to direct patient care and disease prevention.

The Coalition stands ready to assist in these endeavors and wishes to thank the Committee for its continued support in research in immunology - the hope for the future for millions afflicted with disorders of the immune system.

Ms. BELLANTI. The organization that I volunteer as chair for was formed in 1983. It consists of 10 voluntary health and professional organizations that represent organizations that have diseases of the immune system. They include such as the Immune Deficiency Foundation, Lupus Foundation of America, Arthritis Foundation, American Academy of Allergy and Immunology, National Multiple Sclerosis Society, the AIDS Project of the Gay Right National Lobby, the National Association of Area Agencies on the Aging, the American Diabetes Association, and the Asthma and Allergy Foundation of America. This diverse group of organizations, although it represents many diseases, has one common bond and that is the disease of the immune system and the science of immunology.

Perhaps after the comments of the last speaker I think one significant instance where dollars and research moneys being invested for the future might definitely be the science of immunology. In respect to this, and most importantly, I would like to thank you, Mr. Chairman, and your committee for your outstanding support and strong commitment to the research endeavors in the field of immunology. It has been through this committee's strong language over the last 3 years that the research initiative has flourished and expanded with at least a 10-percent increase in funding, which has allowed the research endeavors in the field of immunology to flourish.

The coalition's statement and the description of the immune system are considered in my written testimony. But may I just say recent research efforts—you have to bear with me also. I am a lay individual so you and I share a certain bond of ignorance. Yet I have learned a tremendous amount also being a member of this organization.

It seems to me that the research efforts in basic and clinical immunology have put us on the threshold of discovering new insights into the mechanisms of the entire system and what might be found that is an advantage in one organ system has led to some increases in research that have led to discoveries and breakthroughs in others.

Specifically, looking for the virus that causes AIDS may indeed help us to find the mechanism by which children with immune deficiencies, that they can find information there.

The national coalition therefore is speaking with one voice not so much disease-oriented as it is to ask you to consider the expansion of the immunology initiative which this committee began in 1984. The expansion of this initiative would allow research to continue in many fields. These also are included in the testimony.

Immunology is one of the broadest areas of research at the National Institutes of Health. Like other Institutes, immunology is done in every one of the Institutes. I think, looking at the immunology initiative that came out of the National Institutes of Health, the priorities that were established by each of the Institutes have a cross-cutting section of immunology which is different from the diagonal and the lateral kinds of research that has been done. Immunology now covers across all of the Institutes; and, fortunately, there is a tremendous amount of language between each of the Institutes so there is cooperative work going on.

Because your committee has demonstrated its support of research in immunology by creating the immunology initiative in 1984, to further expand this initiative the national coalition is requesting report language to include the following.

An updated report on the immunology research in public health service, that it be made available to this committee before the budget hearings so we can see that the report reflects the strategies for accelerating the application of that basic science to the clinical situation, and in particular to those diseases of the immune system, and that the report should include any progress that has been made in the Institutes and anything that has been done since the immunology initiative, and that it also should include the research that is presently being done.

In addition to the immunology research report, we would like to urge this committee to request report language to call for an NIH working conference, to bring all of the research scientists and practicing people in immunology together so they can establish a research agenda with initiatives and directives so that we will know where the research is to go.

The coalition stands ready to assist you and this committee in these endeavors. Again, we wish to thank you on behalf of the millions of people who are afflicted with disorders of the immune system because research in immunology is their hope. Thank you very much.

Senator WEICKER. Thank you very much. I think it is interesting, you say that there has to be a cooperative effort here. One doesn't know from whence comes the solution.

If I am not mistaken, and staff can correct me, but the breakthrough in herpes came out of the Dental Institute. You probably wouldn't think that is where it would come from.

Ms. BELLANTI. I think there is a lot more immunology research going on than we are reporting. Therefore, one particular institute or one particular area doing research is in the dark as to what has been done. So if we get everything together, perhaps we can urge things forward.

Senator WEICKER. Senator Specter?

Senator SPECTER. Thank you, Mr. Chairman. At the outset, I would like to commend you for this hearing, a part of the series of very exhaustive hearings on this very, very important subject. I regret I am due to chair the Juvenile Justice Subcommittee at this time. If I may, I would like to submit certain questions for the record and thank all of the witnesses here today and thank you for your support.

Senator WEICKER. Thank you very much, Senator Specter. Indeed, I have already submitted some questions to Dr. Rosenberg. I thank you for your active interest in this.

Senator SPECTER. Thank you.

Senator WEICKER. Thank you very much, Miss Bellanti.

STATEMENT OF SHELDON M. WOLFF, M.D., THE INFECTIOUS DISEASES SOCIETY OF AMERICA

Senator WEICKER. The next witness is Sheldon Wolff, The Infectious Diseases Society of America.

Dr. WOLFF. Mr. Chairman, my name is Sheldon M. Wolff. I have for the last 8 years been chairman of the Department of Medicine at Tufts University in Boston.

My testimony today is presented on behalf of the Infectious Diseases Society of America, an organization of physicians and scientists dedicated to the sharing of knowledge and the fostering of research in the area of infectious diseases.

Mr. Chairman, I would like to take this opportunity to express the Infectious Diseases Society's appreciation to you today for your support of the National Institute of Allergy and Infectious Diseases. Thanks to your efforts to increase funding for biomedical research, and assuming the OMB multiyear funding proposal is defeated, the NIAID's payline jumped from 167 to 170 and the percentage of grants funded to nearly 40 percent this year.

Moreover, please know that your efforts to derail the administration's thinly disguised proposal to cut the number of research grants awarded by the NIH has the appreciation of the entire biomedical research community.

Mr. Chairman, I come before you today to stress the importance of the work conducted under the auspices of the NIAID. Research sponsored by this Institute has contributed to, for example, delineation of the nature of immunity affecting AIDS, which may affect as many as 1 million people today; development of a vaccine against hepatitis B; and development of a revolutionary new vaccine for malaria, one of the world's most serious health problems.

Accelerated work in vaccine development is critical if we are to succeed in preventing disease and disability in this country and overseas and make the vaccines we now use safer and more effective.

Thanks to the support of the Congress, already three high priority vaccines are expected to be licensed in the next 3 years: A new generation of hepatitus B, Hemophilus influenza type b, for children under the age of 2, and a chicken pox vaccine. The advent of recombinant DNA technology has made much of this progress possible and has enabled researchers to make significant gains in developing vaccines against malaria and herpes and improving the current pertussis vaccine.

However, there are at least 35 other diseases identified by the Institute of Medicine as candidates for accelerated vaccine development on which we are unable to begin full-scale research simply because of the lack of funds.

Mr. Chairman, the administration's budget proposal for 1986 would decrease the funding level for NIAID by $16 million below last year's appropriation and allow less than 32 percent of the approved grants to be funded. This request is simply not sufficient when you consider the damaging impact that cutting the NIAID's funds would have on research opportunities on the horizon.

A few examples are research into the immune system would be retarded in important areas that could be expected to lead to a better understanding of the immune mechanisms in organ transplantation; unraveling of the complex events that occur during inflammation; and defining the mechanism of allergic response. Bacteriologic research needed to develop ways to cure and combat sexually transmitted diseases would be seriously stymied. Further work in parasitic diseases, which affect billions of people worldwide, will face major setbacks.

Given the range and scope of scientific opportunities, it is clear that the NIAID could make productive use of a budget of some $449 million in fiscal year 1986, a 21-percent increase over last year's appropriation. While it might be unrealistic to hope the Institute's budget would be increased by 21 percent in the face of mounting congressional concern over the deficit, I raise this issue to illustrate the fact that the NIAID has the potential to capitalize on many exciting scientific advances if provided with sufficient resources by the Congress.

In both fiscal year 1983 and fiscal year 1984, and even in 1985, the NIAID payline ranked dead last among the Institutes that comprise the NIH. There is a wealth of outstanding research applications that the NIAID must turn away every year simply because of the lack of funding.

Moreover, the NIAID's inability to support a comparable number of grants and scientists is discouraging many bright young men and women from pursuing research in the field of infectious diseases because the chances of having a research project grant approved, even one that is without question meritorious, are significantly less than if you pursue some other kind of research.

Therefore, to reverse this discouraging trend, it is important that the NIAID receive an increase in its budget of at least 15 percent over last year's appropriation, for a total budget of some $424 million. This increase will help boost the Institute's payline toward 180, bringing it more in line with its sister Institutes. It would also provide funds for the training awards that support young scientists in this field of research.

Mr. Chairman, I thank you again for your support for the NIAID's work and for the biomedical research community generally. We sincerely appreciate your leadership.

I would be happy to answer any questions you might have.

Senator WEICKER. You have in your testimony:

> For example, it was reported recently that as many as 300,000 people may have been unknowingly affected with the AIDS virus. Of those 300,000, approximately 10 percent are expected to develop AIDS and at least 80 percent of those infected will die within 2 years.

On the matter of AIDS, just the mathematical progression of AIDS cases, if you extrapolated from the present statistics, that would be pretty staggering, wouldn't it?

Dr. WOLFF. Yes; it would be.

Senator WEICKER. If we had a doubling every year here.

Dr. WOLFF. The reported cases were doubling every 6 months. That seems to have leveled off somewhat. But with the antibody determination and screening, one projects the number of patients potentially who have been exposed to the AIDS virus will be somewhere between 500,000 and 1 million.

Senator WEICKER. Within what period of time?

Dr. WOLFF. Generally one considers the incubation period for infection is between 2 and 5 years.

Senator WEICKER. I thank you very much for your testimony. I appreciate it. I happen to be a great supporter of the work done at this particular Institute. Dr. Krausse has lent leadership to it, and I know there are exciting things coming forth, not the least of which is we are very close on a breakthrough for a vaccine for malaria.

Dr. WOLFF. Yes, sir. That is correct.

PREPARED STATEMENT

Senator WEICKER. Thank you. Your prepared statement will be inserted in its entirety.

[The statement follows:]

STATEMENT OF SHELDON M. WOLFF

Mr. Chairman, and members of the Committee, my name is Sheldon M. Wolff. I have for the last eight years been Chairman of the Department of Medicine at Tufts University School of Medicine, and Physician-in-Chief of the New England Medical Center. From 1960 through 1977, I was privileged to work at the National Institutes of Health. In 1968, I became Clinical Director of the National Institute of Allergy and Infectious Diseases, and Chief of its Laboratory of Clinical Investigation. I presently hold an NIH research grant, and the department for which I am responsible conducts research under NIH grants and contracts that total several millions of dollars. In addition, I am a member of the National Advisory Council on Allergy and Infectious Diseases.

My testimony today is presented on behalf of the Infectious Diseases Society of America, an organization of physicians and scientists dedicated to the sharing of knowledge and the fostering of research in the area of infectious diseases. I am at present the Chairman of its Public Policy Committee, and I am past-President of the Society. We represent the overwhelming majority of infectious diseases specialists in this country and, in particular, those individuals involved in clinical and basic research in infectious diseases.

Mr. Chairman, I would like to take this opportunity to express the IDSA's appreciation to you for your support for the National Institute for Allergy and Infectious Diseases (NIAID). Thanks to your efforts to increase funding for biomedical research, the NIAID's payline jumped from 167 to 170 and the percentage of grants funded to nearly 40% this year. Moreover, please know that your efforts to derail the Administration's thinly disguised proposal to cut the number of research grants awarded by the NIH, has the appreciation of the entire biomedical research community.

Although I do not intend to dwell an length on the subject, the Administration's original proposal to fund grants on a multiyear basis would have reduced the number of new and competing grants awarded by the NIAID from 563 to 431, a devastating loss of 132 grants. Perhaps just as important, however, is the fact that if the Administration's scheme were allowed to succeed it would serve to undermine the research community's confidence in government. Many researchers who have been advised that they will receive research grants have now been notified that this may not be the case. We ask, therefore, that you continue your efforts on their behalf so that research will not be interrupted and that this nation's cadre of biomedical researchers will be able to renew their faith in government.

Finally, I also want to mention that in an extensive legal analysis prepared for the IDSA by counsel, we concluded, as did the Comptroller General, that the Administration's plan to multiyear fund research grants is illegal. Our analysis of this issue has been made available to your staff and is appended to our testimony. 1/

Mr. Chairman, I come before you today to stress the importance of the work conducted under the auspices of the NIAID. Under the stewardship of the NIAID:

° A vaccine against hepatitis B was developed;

° Recombinant DNA technology was employed to develop a revolutionary new vaccine for malaria -- one of the world's most serious health problems;

° The virus that causes Acquired Immune Deficiency Syndrome (AIDS) was unmasked.

However, the unmet needs in the area of infectious diseases

1/ ~~While~~ we agree with the Comptroller General's conclusion on this matter, I should note that we take issue with his finding that the proposal does not violate the appropriations act, P.L. 98-619. As you will find discussed at length in the brief, several courts have concluded that since appropriations acts are inherently ambiguous, reliance on legislative history, including statements by relevant Committee Chairmen and sponsors of the appropriations act, is permissible to determine Congressional intent.

are staggering. For example, it was reported recently that as many as 300,000 people may have been unknowingly affected with the AIDS virus. Of those 300,000, approximately 10% are expected to develop AIDS and at least 80% of those infected will die within two years. Moreover, as it stands now, even those few individuals who actually survive AIDS will never see their immune system return to normal.

Accelerated work in vaccine development is critical if we are to succeed in preventing disease and disability in this country and abroad, and make the vaccines we now use safer and more effective. Already, thanks to the support of the Congress, three high priority vaccines are expected to be licensed within two years, hepatitus B, Hemophilus influenza type b, and Varicella (chicken pox). The advent of recombinant DNA technology has made much of this progress possible, and has enabled researchers to make significant gains in developing vaccines against malaria and herpes and improving the current pertussis vaccine. However, there are at least 35 other diseases identified by the Institute of Medicine as candidates for accelerated vaccine development on which we are unable to begin full-scale research simply because of the lack of funds.

The Administration's budget proposal for fiscal year (FY) 1986 would decrease the funding level for the NIAID by $16 million below last year's appropriation and allow less than 32 percent of the approved grants to be funded. Mr. Chairman, this request is simply not sufficient when you consider the damaging impact that cutting the NIAID's funds would have on the research opportunities clearly on the horizon. For example:

- Research into the immune system would be retarded in important areas that could be expected to lead to a better understanding of the immune mechanisms in organ transplantation; unraveling of the complex events that occur during inflamation; and defining the mechanism of allergic responses.
- Bacteriologic research needed to develop ways to cure and combat sexually transmitted diseases would be stymied.
- Further work in parasitic diseases, which affect billions of people worldwide, will face setbacks.

Given the range and scope of scientific opportunities it is clear that the NIAID would make productive use of a budget of some $449 million in FY 1986, a 21 percent increase over last year's appropriation. I realize that it is unrealistic to hope that the NIAID's budget would be increased 21 percent in the face of mounting Congressional concern over the deficit. However, I raise the issue to illustrate the fact that the NIAID has within its grasp the potential to capitalize on many exciting scientific advances if provided with sufficient resources by the Congress.

Historically, the NIAID has had the lowest payline at the NIH. In both FY 1983 and 1984, and even in 1985, the NIAID payline ranked dead last among the institutes that comprise the NIH. What this figure tells us is that there are a wealth of outstanding research applications that the NIAID must turn away every year simply because of the lack of funding. Moreover, the NIAID~~'s~~ inability to support a comparable number of grants and scientists is discouraging many bright young men and women from pursuing research in the field of infectious diseases because the chances of having a research project grant approved -- even one that is without question meritorious -- are significantly less than if you pursue some other kind of research. Therefore, to reverse this discouraging trend it is important that the NIAID receive an increase in its budget of at least 15 percent over last year's appropriation, for a total budget of some $424 million. This increase will help boost the Institute's payline toward 180 and will also provide funds for the training awards that support young scientists in this field of research.

Mr. Chairman, I thank you again for your support for the NIAID's work, and for the biomedical research community generally. We sincerely appreciate your leadership.. I will be happy to answer any questions you or other members of the committee may have.

STATEMENTS OF:

DR. JOHN SALVAGGIO, THE ASTHMA AND ALLERGY FOUNDATION OF AMERICA AND THE AMERICAN ACADEMY OF ALLERGY AND IMMUNOLOGY

DR. JOHN WYNNE, THE ASTHMA AND ALLERGY FOUNDATION OF AMERICA AND THE AMERICAN ACADEMY OF ALLERGY AND IMMUNOLOGY

Senator WEICKER. Our next witnesses are Dr. John Salvaggio and Dr. John Wynne, the Asthma and Allergy Foundation of America and the American Academy of Allergy and Immunology.

Dr. WYNNE. Mr. Chairman, we have a written statement which we have submitted for the record.

My name is John Wynne. I am a volunteer president of the Asthma and Allergy Foundation of America. We have 24 chapters and 60 support groups and interest areas around the country. Our goal is the cure of asthma and other allergic disease.

I am a constituent of yours, Senator Weicker. I live in Glenville, in Greenwich.

We are very deeply grateful to you for your help to us over the years and your support of biomedical research. Also, you have hit home with me personally because of your care and protection of the handicapped, as I have a situation in my own family.

I am also a National Trustee of the Leukemia Society. I work for a money center bank. Therefore, I think I know the tensions between the private and public sectors and the difference between economics and empathy.

With me today I am very pleased to be associated with Dr. John Salvaggio. The doctor is the Henderson professor and chief of medicine at Tulane University. He heads up the prestigious Academy of Allergy and Immunology. This group represents really the brightest and best minds we have in our field of immunology.

You have received data on the problems of asthma. I don't need to go into those and take your time. But I think generically they represent lost lives, lost schooling, lost jobs, and lost opportunities. We hope for a cure, and in the last 5 years we thought that we were on an uptick with respect to attracting the best in the field of immunology, which, after all, is the key to everything.

Traveling around the country as a volunteer, you get to talk to scientists, physicians, business people, volunteers, and everybody has been quite enthusiastic about the public support for research and whatever. Now we feel that a lot of this is in jeopardy with the proposed cutback in the NIH budgets. We hope that this committee will accept the notion that an investment now, especially in immunology, brings forth great potential in the health levels of all of us in the future.

We have gotten a lot of input and help from the Heart, Lung and Blood Institute, and more particularly from the NIAID.

I would like to call on Dr. Salvaggio now to make three specific recommendations on this matter.

Dr. SALVAGGIO. I thank you, Senator. I would like to stress only two or three simple points. I hope I take only 30 seconds of this time.

First of all, we would all like to thank you for your very strong support that you have given to the NIH. Most of us in the medical community realize that this whole situation wouldn't have been turned around in 1981 if you hadn't worked and had the vision to do it. So we really want to thank you in this regard. Certainly it represents a clear thinking on your part and vision for the future.

Second, we are all aware, I guess it has been beaten to death, of the efforts you have made with OMB and the President concerning a 6,500 grants limitation. I know I have sat on one of those immunologic study sessions. It is painful to see one out of every four approved grants get funded. It doesn't count all of those that have been disapproved as well. We understand that. I think that maybe we can live with 6,000 grants this year, in my own view. But, Senator, we can't live with this in the future.

The young clinical investigator is an endangered species. Even if there is a group of subspecialists out there, the young liberal investigator in medical school who represents the future of research for this country is absolutely in danger. This number, in my view, will have to increase. It will have to continue to go up in the future. That is the second point I wanted to make.

I think the third point I want to stress is one that everyone stressed. I am sure Mrs. Bellanti and Dr. Wolff and all have stressed it. That is the importance of the immune system. I mean literally without an immune system all sorts of chronic and debilitating, incapacitating diseases occur and death is imminent. It runs the gamut of actually letting us understand the mechanisms of diseases from cancer on the one hand through allergies and infectious diseases on the other hand. The system is so vital.

The major portion of the funding of this, at least 50 percent of it, comes under the NIAID, certainly under Dr. Krausse and Dr. Fountien. I would hope that the Senate would have the vision to continue to supply increased funds for this Institute. If ever there are any handicapped people, it is people with chronic debilitating immune system and allergic diseases.

With that in mind, I would like to ask your support for this Institute. Thank you very much for listening to us.

PREPARED STATEMENT AND LETTER

Senator WEICKER. Dr. Salvaggio, thank you very much, and, John, thank you for coming by here and testifying. I appreciate it. Your statement will be included in the record at this point, along with other statements for the record on appropriations for the National Institute of Allergy and Infectious Diseases.

Dr. SALVAGGIO. Thank you.

Dr. WYNNE. Thank you.

[The information follows:]

STATEMENT OF DR. JOHN SALVAGGIO

Mr. Chairman, my name is John Salvaggio, Henderson Professor and Chairman, Department of Medicine at Tulane University, and also President of the American Academy of Allergy and Immunology - - the largest society of physicians and researchers in these fields with a membership of nearly 4,000 in the United States and 41 other countries.

Mr. Chairman, my name is John Wynne, National President of the Asthma & Allergy Foundation of America, a voluntary health agency with 24 Chapters and over 60 other support groups and interest areas. We are the focus of all-sectors' support for the health needs of over 35 million American children and adults with asthma and allergic diseases.

Both the Academy and Foundation are working hard toward one common goal: the eradication of **asthma and allergic diseases.** These diseases are among the nation's most common, costly, and misunderstood health problems. Approximately one out of every six Americans suffers from at least one of these disorders. Conservative estimates indicate 9 million Americans suffer from asthma, another 15 million have hay fever alone, or allergic reactions to food, drugs, or insect stings. More than 6 million of these suffers are children who have at least one allergic disease, and many more than one.

Americans suffering from asthma and allergic diseases spend in excess of $2 billion each year for physicians' services, drugs, and hospital and nursing home care. While severe allergic reactions can cause death, most allergic illnesses are of a chronic nature that leads to restricted activity and loss of work and school time. America's asthma sufferers spend a total of 35 million days in bed each year because of illness - are more difficult to calculate, but they exceed $800 million a year for asthma and hay fever alone.

Recent data analyzing medicare trends further illustrates the costs of asthma and allergic diseases to the health care system. The Health Care Financing Administration's (HCFA) April 1985 Analysis for the Prospective Payment System shows that to date, five diagnostic related-grouping (DRG) categories ranking within the top 25 DRG's are due to respiratory and lung disorders. Moving up two positions and ranking number ten this year, is the category considered for bronchitis and asthma. This accounts for 25,369 discharges from October 1st through April with an average length of stay of 6.4 days per medicare patient.

Research is our only hope for the effective control of these diseases and hopefully, their prevention altogether. Research is also our best hope to combat myths and false promises that add to the suffering of too many asthmatic and allergic patients and their families. That is why, Mr. Chairman, we have brought our concerns before this Subcommittee today. We strongly believe the President's proposed budget for the National Institutes of Health (NIH) falls dangerously short of this nation's research needs, and may jeopardize the pace of scientific progress not only for asthma, allergies, and other immunologic diseases, but for all other health problems facing this country today.

Simply put, our message is clear - and addresses three issues relating to increased support for medical research.

Dr. Salvaggio will elaborate:

Mr. Chairman, our three areas are:

1.) Restoration of the full amount you and your committee provided for the NIH in fiscal year 1985.
2.) Continued stability in fiscal 1986.
3.) Emphasis on immune research programs particularly within the National Institue of Allergy and Infectious Diseases and the National Heart,Lung and Blood Institute.

Mr. Chairman, with you and your committees leadership in fiscal 1985, medical research had its first real ray of sunshine in nearly 5 years. The increase provided by Congress - - and signed into Public Law by the President - - gave a real shot of enthusiasm to the research community. Potential Young researchers were taking notice and the many, many opportunities for cure, prevention and treatment were going to finally be addressed in an aggressive way.

Then the door was slammed and here we are today with the President reneging, and in fact, proposing an actual reduction of 10% below even last years level for grants.

Mr. Chairman, not only will such an action destroy many research projects, but it also sets a very dangerous precedent that will allow the President to arbitrarily modify Congressional actions.

We urge the Congress to act quickly to ensure the minimal disruption in research.

Secondly, we concur completely with the ad hoc group for medical research of which both of our groups are members.

As you well know, for fiscal 1986 we support a very modest budget for the NIH - - some are even calling us conservative.

- -- stability and funding of 6,500 grants
- -- this would fund approximately 38% of approved grants rather than only 1 out of 4 as the President proposes. I can remember a time, not long ago when 50% of approved grants were being funded.
- -- continuing clinical trials, training and a modest growth in the centers program is also proposed.
- -- finally a boost for construction and instrumentation is a must if we are to continue research in productive environments.

Basically, this is simply a "current services" request and merely 3% above that level.

As you know, the President has proposed a 6% cut for the NIH and a 22% increase for R & D in the military. Given the tremendous moral as well as cost saving impact of medical research we urge you to accept our proposal.

Finally, we thank-you and request that you continue the Committee's strong support for immune related programs.

Without an immune system - - working correctly - - disease and death are imminent.

Heart, Lung and Blood Institute:

The immune defense mechanisms of the human body play a role in a wide diversity of conditions, including many diseases and disorders of the heart, lungs, and blood. In 1984, the National Heart, Lung and Blood Institute provided $25 million in support of some 150 individual research projects concerned with immune system disorders, and these ranged across the complete spectrum of the Institute's programs. In the Heart Program, Kawasaki Disease, which produces damage to the coronary arteries, with rising incidence in children in the USA, has an underlying detect involving cells of the immune system, and arteriosclerosis, or hardening of the arteries, the underlying problem in most cases of heart attack, has a complex set of factors, almost certainly including derangements in the immune system.

Diseases of the lung, many resulting from occupational exposure to airborne pollutants, are frequently characterized by immune system disorders. Chronic lung diseases, such as asthma, appear to involve repeated exposure to injurious stimulants of the immune defenses of the lungs.

National Institute of Allergy and Infectious Disease:

Mr. Chairman the National Institute of Allergy and Infectious Diseases does more research than any other Institute in the Immune System - - nearly 50% of all immune research at the NIH is conducted by NIAID programs.

Yet NIAID, under the President's request will have one of the lowest paylines at the NIH because it places so much emphasis on research grants.

As a result, we request the specific emphasis be placed on this Institute to ensure growth and not cutbacks in:

- -- **research grants**, the life line of good research and the first link in the chain of prevention.
- -- **centers**, where clinical care, prevention and research programs all come together.
- -- **training**, which is critical to the renewal of our research personnel.
- -- **vaccine development**, which is the ultimate goal of all researchers - - the last link in the chain of pervention.

We could go on and on about the importance of these programs and the Institute, which has a fine new Director. We must ensure that he and his colleagues have the tools required to do the job.

The point is, the **NIAID** right now with its work on the immune system and vaccine development is perched to take-off on effective means of treatment, cure and prevention for a long list of diseases in addition to asthma and allergies.

Your continued emphasis and support will help us, help this country in reducing health care costs while alleviating a tremendous amount of unnecessary death, pain and suffering to millions of people.

LETTER FROM CARL E. MOORE, NATIONAL COUNSEL ASSOCIATES, INC.

AUGUST 1, 1985.

At your suggestion we are enclosing paragraphs which may be suitable for inclusion in the subcommittee's report on appropriations for 1986. Please call me if there are any questions.

Incidentally, since the publication recently of articles in the press and in medical journals on chronic Epstein-Barr virus, Mr. Van Zelst's office in Glenview, IL, has been receiving hundreds of inquiries regarding the disease.

Your cooperation is greatly appreciated.

CARL E. MOORE.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Chronic Epstein-Barr virus infection [CEBV], a debilitating disease which affects many people has been brought to the committee's attention. As yet no treatment or cure is known. A CEBV workshop held at NIH in April was attended by more than 40 doctors. Publication of three papers about CEBV in medical journals and media attention have resulted in thousands of inquiries directed to research and support centers identified with this illness. One research project underway to study the incidence of CEBV hints at the fact that this disease may be much more widespread than formerly believed.

The Epstein-Barr virus is one of the herpes group of viruses. Research in autoimmune and viral disorders of this type may serve to unlock many other perplexing medical enigmas, including a wide spectrum of other viral diseases. The committee hopes that the National Institute of Health, Allergy and Infectious Disease will allocate adequate resources for research on chronic Epstein-Barr virus infection to find ways to test patients for diagnosis of the illness, and to the development of treatment and cure.

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

STATEMENT OF BLAIR E. BATSON, M.D., CHAIRMAN, COUNCIL ON GOVERNMENT AFFAIRS, AMERICAN ACADEMY OF PEDIATRICS

Senator WEICKER. Next is the National Institute of Child Health and Human Development. The first witness is Blair Batson, Chairman, Council on Government Affairs, American Academy of Pediatrics.

Dr. BATSON. Mr. Chairman, I am Dr. Blair Batson, a pediatrician from Jackson, MS, here today representing the pediatric community and a voice for children in this budgetary process.

CHILDHOOD IMMUNIZATIONS

Staggering cost increases over the past 2 years, coupled with a woefully inadequate stockpile of vaccines, threaten the security of our children from the ravages of preventable childhood diseases. We are requesting an increase of $45.3 million. These moneys would be allocated as follows: $10 million to States for purchase of vaccine, $20 million for vaccine stockpiles, $11.4 million for a new vaccine, a vaccine just released for use in 2 to 5 year olds to prevent the common cause of bacterial meningitis, and $3.9 million to initiate a screening program for high-risk mothers for babies with perinatal hepatitis B.

MATERNAL AND CHILD HEALTH

Given the budgetary restraints of the current fiscal year, we reluctantly agree to a freeze in this budget item. For the record, however, this acceptance is predicated on the assumption that the proposed Medicaid cap is defeated. Any attempt to further reduce Medicaid coverage for mothers and children will severely compromise the maternal and child health block grant and the children they serve.

NIH RESEARCH

We are pleased to join with the 125 member organizations of the ad hoc group for medical research funding in support of a $5.7 billion appropriation for NIH. While we recognize and applaud the contributions made by all of the Institutes in the area of maternal and child health, I will restrict my comments to NICHD. We certainly oppose the proposed decrease of 5.5 percent in funding. Rather, we request you consider a 10.7-percent increase to a level of $347.2 million. It is indeed shortsighted to decrease moneys for the Institute which is directed at preventing disability and death during the critical period surrounding infancy and childhood.

Let me highlight just two areas to support this request. One is a special initiative in the prevention of low birth weight. Two-thirds of all infant deaths in this country are attributed to low birth weight. Research supported by NICHD on this area could contribute significantly toward eliminating or ameliorating the crippling and debilitating conditions which are common complications of low birth weight in infants and toward increasing the expenditure of health care dollars in the neonatal area.

Second is in the area of injury prevention. Injuries are the leading cause of death for persons from 1 through 44. Injuries in children account for one-half of all deaths. Our country needs one branch of the Federal Government to take the lead role in the coordinated effort of injury prevention, whether it is NICHD, the Department of Transportation, or whomever.

NICHD should take the lead in expanding and coordinating the injury research and development effort.

PRIMARY CARE TRAINING

In spite of the administration's proclamation that health professions subsidies are no longer necessary and program termination imposes no cost to society, such is most certainly not the case for primary care education.

We request the current budget of $18.5 million be maintained for general pediatrics and internal medicine. The success of the programs warrant their continued funding. As pediatricians and medical educators, we know simply graduating more doctors does not mean they will necessarily practice primary care and do so in geographically underserved areas. Thus, targeted support for programs like the Public Health Service grants are essential if we are to address these manpower problems. The loss of grant support for these primary care training programs would result in a reversal of many gains in physician distribution, but, more important, would shift emphasis back to subspecialty rather than generalist training.

If I may turn for a moment to the current fiscal year. There are many problems of yet unfunded demonstration projects to improve emergency medical services for children. These projects were authorized by the Congress, but through a quirk in the process were not included in the fiscal 1985 appropriations bill. I hope you will act favorably on forthcoming supplementals to include this $2 million item.

In conclusion, let me emphasize expanding and improving health and related services for children is not inconsistent with controlling skyrocketing health costs. In truth, if you will reflect on the requests which we have made, all of them will cut or have the potential to cut projected health care costs significantly.

Thank you, Mr. Chairman.

Senator WEICKER. On the maternal health care block grant, what about childhood immunizations?

[Discussion off the record with staff.]

Senator WEICKER. Is the freeze going to be sufficient in that program? Does anybody know, what do we have there?

[Discussion off the record with staff.]

Dr. Batson. The administration proposal is at level funding, the same as last year.

Senator Weicker. Is that going to be sufficient to guarantee the vaccine supplies?

Dr. Batson. It certainly won't do for the vaccine stockpile. It is going to give real problems to the States because you see, for instance, DPT alone has gone up 300 percent in 2 years. Even talking to our own State health director, they don't know where they are going to get the money for the CDC projected increase of 25 percent by July 1. Many people feel it will be much higher than that. For instance, there has just been another suit in this situation in which there was a $3.5 million judgment. That is going to mean the fellow who insures our supplier literally may push it up even higher next year.

So the costs are going up rapidly. The availability from suppliers is a little better since the Canadian company just last week came back on line after they were able to verify their insurability in terms of this. So the supply may be there, but in terms of whether we are going to have it—remember that the Federal Government purchases, or put it this way, they vaccinate one-half of the 1.9 million children who are vaccinated through the health departments, one-half in the private and one-half in the public sector. The Federal Government sells vaccine to the States at a reduced cost. I know we don't have the money in our budget for our State, for instance, and I hear that all around.

PREPARED STATEMENT

Senator Weicker. We will certainly take a look at the items you have raised. I appreciate your testimony. I think somehow we should be able to balance budgets around here without doing it on the backs of kids.

Dr. Batson. Senator Weicker, you have always been that way, and I hope you will continue to be that way.

Senator Weicker. Thank you.

Dr. Batson. Thank you.

[The statement follows:]

STATEMENT OF DR. BLAIR E. BATSON

Mr. Chairman, I am Blair E. Batson, M.D., a pediatrician from Jackson, Mississippi, here today representing the American Academy of Pediatrics, the Ambulatory Pediatric Association, the American Pediatric Society, the Association of Medical School Pediatric Department Chairmen and the Society for Pediatric Research. I am also here to represent a voice for children in this budgetary process. My testimony will focus on four areas which play a significant role in giving each child the opportunity to be as healthy as possible and to develop to his or her greatest potential. These are: 1) the childhood immunization program; 2) the maternal and child health block grant; 3) NIH research, with emphasis on NICHD; and 4) primary care training grants.

CHILDHOOD IMMUNIZATIONS

FUNDING HISTORY (In Millions)	1984	1985	ADMIN. 1986 PROPOSED	1986 SUGGESTED
	$42	$54	$54	$99.3

In fiscal 1985, $42 million was earmarked for state grant activities, $8 million for surveillance, research & technical assistance and $4 million for vaccine stockpile.

There is no better example of the cost benefits of preventive health services than our childhood immunization program. The argument that immunizations are less needed today and that childhood diseases are less deadly than in prior years simply will not hold. These diseases have not changed and we do not have specific antibiotics for any one of them. Until we have achieved eradication of these diseases, our commitment cannot waiver.

There are approximately 3.8 million children born every year. For their basic immunizing, these children will require three doses of DTP (diphtheria, tetanus toxoids with pertussis vaccine), two doses of oral polio vaccine and one dose of MMR (measles, mumps and rubella). At eighteen months they require a booster dose of DTP and oral polio vaccine and again at school entry. The federal government is responsible for half this population or 1.9 million children. The private sector covers the other half.

Over the past year alone, the cost for MMR increased 26.9%, polio by 10% and DTP by 10% (up 300% over the past 2 years). CDC cost estimates provide for a 25% increase in MMR, a 10% increase in polio and a 10% increase in DTP for fiscal 1986. CDC does purchase MMR and polio in bulk and sells it to states as a reduced rate. CDC's cost per dose for MMR currently is $6.85 ($a8.56 for FY'86) and 80.4 cents for polio (88.4 cents for FY'86). Cost for DTP vaccine is $2.80 per dose ($3.08 for FY'86).

Based on ongoing negotiations for insurance, we believe these cost increases are very conservative and anticipate greater increases in costs for the next fiscal year. At a minimum, a conservative estimate would indicate an absolute necessity for an additional $10 million in grants to states just to stay even.

In repeated testimony on Capitol Hill, CDC has stated that a 6-month supply of vaccine is the minimal supply that should be in reserve. This country now has only one producer of MMR and polio and two producers of DTP. Such a stockpile is necessary in order to help prevent any disruption of supply. Currently, CDC has a stockpile of three months for MMR and polio and none for DTP. An additional $20 million would be required to bring all three vaccines closer to this goal.

Advanced technology affords us the privilege of looking to new initiatives in this field. A new vaccine, Haemophilus influenzae, type B, (H. flu B), has just been approved and recommended for use in two to five-year olds. Such vaccine would prevent the most common cause of bacterial meningitis in children. If purchased in bulk by CDC, at an estimated savings of 10-15%, the cost of this vaccine would be around $6.00 per dose. An additional $11.4 million would be necessary to implement this program.

On a very small scale, a few public health clinics have initiated a screening program for high risk mothers for babies with perinatal hepititis B. If these infants are not treated at birth they will be infected. Around 4000 cases occur each year. By initiating a screening program for these high risk mothers it is estimated that 2700 cases of hepititis B could be prevented. Such a program would cost $3.9 million.

In summary, we request a $45.3 million increase for the immunization program for fiscal 1986.

MATERNAL AND CHILD HEALTH BLOCK GRANT

FUNDING HISTORY (In Millions)	1984	1985	ADMIN. 1986 PROPOSED	1986 SUGGESTED
	$399	$478	$478	$478

Given the budgetary restraints of the current fiscal year, we reluctantly agree to a freeze in this budget item. For the record, however, this acceptance is predicated on the assumption that the Medicaid program remain intact. The proposed funding cap on Medicaid would allow for program growth of 3%, less than half the medical care inflation rate for fiscal 1986. Dramatic cost shifting from other health programs, cutbacks in needed services or both will occur. Experience tells us that the children will bear an unfair share of this burden. With the tightening of eligibility criteria for participation in Medicaid, a growing number of young mothers and children will be forced to turn to the services provided by the maternal and child health block, services already stretched to capacity. Any further attempt to reduce Medicaid coverage for mothers and children will severely compromise the maternal and child health block grant. At particular and growing risk are the "new" poor who face a void in maternal and child health services.

In summary, we recommend the maintenance of the maternal and child health block grant with its current 15 percent set-aside authority.

NIH RESEARCH

FUNDING HISTORY: (In Billions)	1984	1985	ADMIN. 1986 PROPOSED	1986 SUGGESTED
	$4.5	$5.1	$4.9	$5.7

The pediatric community is pleased to join with the 125 member organizations of the Ad Hoc Group for Medical Research Funding in support of a $5.7 billion appropriations for NIH for fiscal year 1986. Additional support for basic research is based on the premise that the long-term economic strength of this Nation and the continued improvement in the well-being of its people demands a sustained investment in basic scientific research and our investigators. While we recognize and applaud the attention given by the various Institutes to the areas of maternal and child health, our comments will center on the National Institute of Child Health and Human Development (NICHD), the focal point of these critical efforts.

FUNDING HISTORY: (In Millions)	1984	1985	ADMIN. 1986 PROPOSED	1986 SUGGESTED
	$272.9	$310.1	$293.1	$347.2

The proposed 5.5% decrease in funding for this institute is unconscionable. At a time of shrinking budgets, it is indeed shortsighted to decrease monies for the Institute directed at preventing disability and death during the critical period surrounding infancy and the ensuing childhood years. In the area of child health research we stand at an important crossroads where new medical opportunities exist. Through your leadership, let us be far-sighted enough as a nation to take advantage of these recent developments.

The additional monies for NICHD would be utilized in the following manner:

- funding of 760 competing research project grants (approximately 45% of the estimated approved research project grants);
- an expanded research initiative in the prevention of low birth weight;
- funding for an additional center to focus on perinatal pharmacology and toxicology with emphasis on the way drugs and chemicals affect fetal and neonatal growth and development;
- support for 86 additional individual and institutional full-time-equivalent training positions;
- a major special initiative to support research leading to the development and improved use of contraceptive methods; and
- enhanced efforts in expanding and coordinating trauma, research and reducing the toll of injuries in childhood.

I would like to highlight two of the above initiatives which speak to the needed investment of monies in this area.

In 1984, NICHD began a major special initiative in the prevention of low birth weight. Such an initiative must be expanded. The impact of low birth weight on society is profound. Two-thirds of all infant deaths in this country are attributable to low birth weight infants. In fact, the poor U.S. international ranking in infant mortality is due almost entirely to our higher rate of low birth weight infants. Research supported by NICHD on this area could contribute significantly toward eliminating or ameliorating the conditions of mental retardation, cerebral palsy, surgeries, learning problems, blindness and deafness which are common complications of low birth weight infants. Much can be accomplished with this modest request for increased funding.

While considerable attention has been focused on disease in this country, the leading cause of death in the United States for persons one through 44 is injuries. For young children, injuries account for about half of all deaths; in teenagers, for more than half. Society bears the costs of billions of dollars each year for injury related deaths and human suffering. Fundamental knowledge regarding the prevention of childhood injuries is essential. NICHD must take the lead in expanding and coordinating trauma research and development.

In summary, we recommend a funding level of $5.7 billion for NIH, with a specific request for NICHD at a level of $347.2 million for fiscal 1986.

PRIMARY CARE TRAINING

FUNDING HISTORY	1984	1985	1986 ADMIN. PROPOSED	1986 SUGGESTED
(In Millions)	$17.5m	$18.5m	$ 0	$18.5

GENERAL PEDIATRICS/INTERNAL MEDICINE

In spite of the Administration's proclamation that health professions subsidies are no longer necessary and program termination imposes no cost to society, such is most certainly not the case for primary care education. The need for adequate support is pressing.

Primary care is the most comprehensive, cost-effective way of providing health care. Primary care reduces the occurrence and subsequent need for more expensive tertiary consultation and inpatient care. In fact most primary care pediatricians see patients on an ambulatory basis.

A recent study demonstrates a significant difference between families seeing primary care pediatricians and those who did not receive this service. For families using primary care services, hospitalization rates were one-third less and when hospitalization occurred, hospital stays were 15 percent shorter; there were 40 percent lower laboratory charges; visits to the pediatrician for illness declined significantly, and visits for health supervision increased; and finally, patients' satisfaction was higher. In short, a utilization shift occurred in the direction of promoting health, and this can be translated into lower patients costs.

Unfortunately, primary care residency programs have enormous difficulty in obtaining the financial support they need to train primary care physicians. Traditionally, specialties with high levels of tertiary care and procedure-oriented, hospital-based practices, such as surgery and anesthesiology, have received disproportionate hospital, medical school and third-party payer support for residents. This is in large part because of the revenue generated from their procedure-oriented, inpatient services. Given a choice, hospitals will allocate more residency positions in those specialties which bring in more revenue. A disproportionate share of cuts in hospital resident staff comes from pediatric and general internal medicine programs. Since training programs for the most cost-effective form of health care delivery --primary care -- have enormous difficulty achieving even inadequate financial support, federal support is essential if primary care education is to continue and its quality is to be maintained.

In 1976, Congress made a commitment to provide primary care residency training through special projects under Title VII of the Public Health Service Act. Evidence is clear that the programs and trainees funded by these grants during the past several years have been highly successful.

Logic argues that the success of these programs in meeting the goals Congress set for them warrants their continued funding. As pediatricians and medical educators, we know that simply graduating more doctors does not mean they will necessarily practice primary care, and do so in geographically underserved areas. Thus, targeted support for programs like the Public Health Service grants are essential if we are to address these manpower problems. The loss of grant support for these primary care training programs would result in a reversal of many gains in physician distribution but, more important, would shift emphasis back to subspecialty rather than generalist training.

In summary, we recommend that the current commitment for federal support of primary care training for general pediatrics and general internal medicine be maintained at $18.5 million for fiscal 1986.

Mr. Chairman, in conclusion, let me say that in spite of the public outcry and national concern over budget deficits, there are some compromises that simply can not be made. Expanding and improving health and related services for children is not inconsistent with controlling skyrocketing health costs. Let's get our priorities in order. Priority number one must be our children and that message must be reflected in our allocation of precious resources.

STATEMENT OF CRAIG RAMEY, AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, AMERICAN ACADEMY ON MENTAL RETARDATION, JOHN F. KENNEDY CENTER

Senator WEICKER. Next is Mr. Craig Ramey, American Association on Mental Deficiency, American Academy on Mental Retardation, John F. Kennedy Center.

Mr. RAMEY. My name is Craig Ramey. I am here on behalf of the American Association on Mental Deficiency, American Academy on Mental Retardation, and the American Psychological Association. I am Director of Research at the Frankfort Terrane Development Center, sponsored by the National Institute of Child Health and Human Development.

A written statement has been submitted by Dr. Alfred Baumeister. I have a supplement to that testimony. He cannot be here today because of a serious automobile accident he was in in the past week.

I would like to begin by thanking you personally for the support that you have extended on behalf of the retarded and handicapped citizens throughout the years and bring to your attention the fact we currently have 6,600,000 retarded individuals in the United States today and to remind all of us that high quality care and high quality education for the retarded are both costly in terms of dollars and cents for us as a human society. We currently spend over $4 million per year on the care and education of such individuals.

It is clear from research that mental retardation is caused both by a variety of biological circumstances and by a variety of social forces acting in concert with one another. We know that 70 to 80 percent of cases of mental retardation are exacerbated by family poverty and that this condition falls most heavily upon blacks, Hispanics, and other minority groups.

We know that research into the prevention of mental retardation is currently showing great progress. That progress is being evidenced both in the form of basic biological breakthroughs, which are specified in more detail in the testimony, and I would emphasize in the development of new early childhood education techniques which are preventing children from various backgrounds from becoming retarded in the first place.

Much of this breakthrough research is being done in the 12 mental retardation centers sponsored by NICHD. These centers are at the forefront of a new kind of research in mental retardation; that is, research which stresses multidisciplinary, collaborative, long-term efforts.

Because mental retardation is a constellation of behavioral phenomena with biological and social causes, further collaborative research programs we believe should be fostered.

We support the important research program outlined for this committee by Dr. Duanne Alexander, Acting Director of NICHD. But we point out that the agenda cannot be accomplished with the funds requested in the administration's budget.

With these considerations in mind, we respectfully request the following specific items.

First, we urge Congress to increase funding to the NICHD from $313 million in the current fiscal year to $347 million in fiscal year 1986, an increase of about 11 percent. This is in contrast to the administration's request for $293 million, a decrease projected for 1986.

Second, we urge that the mental retardation research centers be designated as a special item in the budget and that $10 million be appropriated for core support for these centers.

Third, we urge the Congress to express its commitment to the continuation of high-quality predoctoral and postdoctoral research training by increasing funds in this category by 10 percent.

Finally, we urge that the Congress specify in report language that mental retardation is a priority mission of the National Institute of Child Health and Human Development.

We thank you.

Senator WEICKER. Mr. Ramey, thank you very much for your testimony. I greatly appreciate it.

Senator Hollings, do you have any questions?

Senator HOLLINGS. No; thank you, Mr. Chairman. I appreciate it.

PREPARED STATEMENTS

Senator WEICKER. We will include in the record in its entirety your submitted statement, along with other statements for the record on appropriations for the National Institute for Child Health and Human Development.

[The statements follow:]

STATEMENT OF THE AMERICAN ACADEMY ON MENTAL RETARDATION

Mr. Chairman, my name is Alfred Baumeister. I am the Director of the John F. Kennedy Center at Vanderbilt University, one of the 12 national Mental Retardation Research Centers constructed and established under the provision of Public Law 88-164. Appearing here today I represent the American Association on Mental Deficiency, the American Academy on Mental Retardation, and the American Psychological Association. These are all professional organizations dedicated to solution of the problems of mental retardation and related disabilities. Speaking on behalf of my many colleagues in these various organizations, I am grateful for the opportunity to share our views concerning federal support, through NICHD, for research on mental retardation and related disabilities. We are aware that Dr. Duane Alexander, Acting Director of NICHD, has testified before this committee and we support his general recommendations.

Mental retardation is a life-long behavioral phenomenon with social, psychological, and biological causes. The principal manifestations are subaverage intelligence, significant impairments to learning, social and physical development, and diminished ability to live independently. Over 200 different etiologic causes are associated with mental retardation, including genetic conditions, disorders of metabolism, problems of pregnancy and birth, brain damage due to a large number of teratogens, accidents, and other untoward circumstances that affect development, such as extensive poverty, undernutrition, and lack of adequate psychological and social stimulation. Even in many of those cases in which we have some knowledge as to cause, we know little about how to prevent or cure.

The human and financial costs to society of mental retardation and the other developmental disabilities are staggering. No other human affliction creates so much suffering, for so long, and at such great cost to the individual, the family, the community, and our nation. There are approximately 6,600,000 retarded persons in the United States today and about one out of every 6 or 7 families is directly affected. To provide care and habilitation to the 130,000 retarded persons who reside in public institutions, government will spend about $4 billion this year. The average cost to the public is more than $1 million over the life time of each severely retarded individual. Approximately 4,000 babies will be born this year with fetal alcohol syndrome. These babies will be severely retarded and most of them will require complete public assistance throughout their lives. Basing my calculations on these facts I can conclude that for this group of FAS babies alone, born in just this year, government will pay over $4 billion for lifetime care.

The cost of education of a retarded child in the public schools is about six times the amount expended on the education of a nonretarded child. The variety of special programs in the community that must be provided for our retarded citizens represents an enormous outlay as well. The costs in terms of human suffering and in lost human resources and potential are beyond financial calculation. We must remember that mental retardation and the other developmental disabilities, if uncorrected, typically persist over a life time and that many thousands of babies will be born in this decade who will never have a chance, for even part of their lives, to share in the ordinary opportunities and challenges that we here enjoy.

Despite the enormous complexities that attend the problem of mental retardation, we have made enormous scientific progress over the past two decades toward the twin goals of prevention and amelioration of mental retardation. Much of this knowledge has been put into practice with outstanding results. For example, we now understand the biochemistry underlying some specific genetic disorders and, through proper intervention, are now able to create medical and environmental conditions where these people, who only two decades ago would have been profoundly retarded, are able to live normal lives. Studies of learning processes have enabled us to develop effective educationally based procedures that ameliorate many of the learning and behavior problems associated with mental retardation. We have also learned a great deal more about causes of mental retardation, knowledge that can have enormous significant public policy implications. For instance, public policy has followed from the empirical demonstration that environmental exposure to lead can cause a continuum of biological and behavioral risks ranging from very severe to mild in form. Similarly, significant implications are inherent in the now convincing experimental and descriptive data showing that alcohol is a teratogen that can have devastating effects on the developing fetus.

Over the past few years a variety of exciting new behavioral and biomedical concepts and techniques have been incorporated into the study of mental retardation, such as the role of peptides and neurotransmitters in the functioning of the nervous system, sophisticated quantitative techniques for the study of neuropathology and neuroanatomy, the introduction of new cytogenetic procedures, the discovery of new methods for analysis of plasticity of behavioral development, and new methods for promoting generalized learning and transfer of skills.

Despite the advances in our understanding of mental retardation and, therefore, of our ability to intervene effectively, the truth is that in most cases we do not know what causes the retardation, or how to prevent it. One fact should be made clear--the source of mental retardation in most cases cannot be traced to a single specific biomedical cause.

Most mental retardation, between 70-80% of the cases, is linked to psychosocial disadvantage. In 1983, 15.2% of our population was below the poverty line. But, as you are aware, minority groups are differentially represented. According to the government's own data 35.7% of blacks and 28.4% of hispanics lived in poverty. These are people who are located in the lower end of the socio-economic scale. Poverty is not a wholesome condition for rearing children. Mental retardation does not cause poverty, but poverty contributes to mental retardation, at all degrees. Yet at the same time, the vast majority of children reared under these conditions will not be retarded. We need to know more about how biological vulnerability interacts with environmental circumstance to produce mental retardation.

I can tell you something about this interaction. The environments in which economically disadvantaged children develop from conception on are far less supportive to physical and mental growth than the environments of children who are not disadvantaged. These differences are profound and enduring and intergenerational. Mothers of such children tend to be less well fed, less well grown, less well cared for, before they reach childbearing age. When they reach childbearing age, they begin to bear children younger, more rapidly, and more often, and they continue to bear them to an older age. When such a mother is pregnant her health will be poorer than that of a woman who is better off. She will smoke more, beginning at a younger age, and will be less likely to quit while pregnant, and her fetus will be exposed to greater risk of infection, drug and alcohol intoxication, and other trauma. She will be less likely to get prenatal care and far more likely to be delivered under substandard conditions. Children of such mothers are smaller at birth, die more readily, are sicker in infancy, suffer a greater rate of accidents, and run a greater risk of neglect than children born in better circumstances. If they survive the first few weeks of life, their mortality thereafer is excessively high and their illnesses more frequent, more persistent and more severe. Their development is negatively influence by their mother's health, her age, her income level, her education, and her habits. During the school years, their nutrition may be poor, they miss more school, their housing is substandard, family income is low, and family disorganization is high.

The research issues are thus very complicated, because we must conduct analyses of interacting biological, behavioral, sociological, and economic variables, about which we have only the most rudimentary knowledge. Our research must be intensified at all levels of analyses, from cytogenetics to behavioral.

Yet, since 1974, the commitment to mental retardation research has deteriorated. For more than 10 years my colleagues and I have conducted various types of analyses of NICHD funding patterns with particular reference to the status of mental retardation as a funding priority within NICHD. The one general and compelling conclusion emerging from these analyses is that funding for mental retardation research, both in absolute and relative terms, is in a much less favorable position today as compared with its status 12 years ago. Since 1974, for example, the overall decline in mental retardation research support, expressed as a proportion of the total budget of the Center for Research on Mothers and Children, is over 20%. In 1985 dollars, our research capability is less than half what it was in 1975. Core support funding for the 12 national Mental Retardation Research Centers has been severely eroded. Attached is a table that shows a regular and continuing decline in relative support for mental retardation research, from 1972 to 1984.

Last year the Congress increased appropriations by $37.6 million over FY 1984, an increase of 13.6%. We regarded that as a very reasonable response and a geniune expression of congressional commitment to the work of the NICHD. However, the will of the Congress--and therefore of the people--was thwarted by the outrageous action of OMB, a governmental organization clearly preferring good bombs over well babies.

The administration request before you now is $293.1 million, a $20.1 million decrease from FY85. That is a 6% decline. Through the magic of OMB's forward funding concept, such a reduction is clearly possible. The arithmetic is impeccable. The problem is that people--children and mothers and families--will be harmed. The organizations I represent are distressed over these events, events that affect not only NICHD, but all of NIH. This is not an abstract budgetary consideration; the health of the people of this nation is at stake. A cutback of our research capabilities is short-sighted, ultimately very costly, and a grievous disservice to millions of American families.

Expenditures for research related to mental retardation have declined steadily both in relation to inflation and as a proportion of the relevant program within NICHD. Therefore, our first major purpose is to assure continued support for mental retardation research and to reverse the decline in funding.

We respectfully encourage the Congress to increase appropriations to the NICHD to a level that, at the minimum, ensures the continuity of research and research training programs and at a level that begins to reduce the decline in funding for mental retardation research about which we spoke earlier. We believe that this can be done in two ways: First, the Congress should provide for an increment in the NICHD budget adequate to offset the cummulative effects of inflation and to accelerate the effort in mental retardation research. Second, and more specifically, you should provide for a meaningful increment in core support for the national Mental Retardation Research Centers.

My colleagues and I also request that some of the implications of the information presented in our comments be refelcted in the narrative report language. We believe that improvement of mental retardation services depends on excellent basic behavioral and biological research in the areas of prevention, early diagnosis and intervention, learning, and long-term care. Most important, because mental retardation is a constellation of behavioral phenomena with numerous biological and psychosocial causes, collaborative research programs incorporating behavioral and biological components should be fostered. We support the important research program outlined for this committee by Dr. Alexander. But that agenda cannot be accomplished with the funds requested in the administration budget. With these considerations in mind we respectfully make the following specific recommendations:

1. We urge the Congress to increase funding to the NICHD from $313.2 million in the current fiscal year to $347.2 million in fiscal year 1986, an increase of about 11%. This is in contrast to the Administration request for $293.1 million for fiscal year 1986.

2. We urge that the Mental Retardation Research Centers be designated as a special item in the budget and that $10 million be appropriated for core support for these centers.

3. We urge the Congress to express its commitment to the continuation of high-quality predoctoral and postdoctoral research training by increasing funds in this category by 10%.

4. We urge that the Congress specify, in report language, that mental retardation is a priority mission of the NICHD.

TRENDS IN MR FUNDING*

Year	Total CRMC Funds	Total CRMC-MR	MRDD	MRRC Core
1972	$42,838,000	$21,365,000	$17,250,000	$5,856,000
1973	41,971,000	21,330,000	16,642,000	6,533,000
1974	51,894,000	23,886,000	18,096,000	5,761,000
1975	55,094,000	25,420,000	18,884,000	5,672,000
1976	60,161,000	27,016,000	20,423,000	5,608,000
1977	64,979,000	28,419,000	21,434,000	6,166,000
1978	73,790,000	30,298,000	23,318,000	6,455,000
1979	102,492,000	35,321,000	28,121,000	6,759,000
1980	101,154,000	34,731,000	27,559,000	6,751,000
1981	106,055,000	32,997,000	26,969,000	6,623,000
1982	105,530,000	31,768,000	25,963,000	6,549,000
1983	123,346,000	35,270,000	29,306,000	7,343,000
1984	135,489,000	35,699,000	29,263,000	7,737,000

Percentages of Total CRMC Funds

Year	Total CRMC-MR	MRDD	MRRC Core
1972	50	40	13.7
1973	51	40	15.6
1974	46	35	11.1
1975	46	34	10.3
1976	45	34	9.3
1977	44	33	9.4
1978	41	32	8.7
1979	34	27	7.0
1980	34	27	6.7
1981	31	25	6.2
1982	30	25	6.2
1983	29	24	6.0
1984	26	22	5.7

*Source of Data: NICHD, Office of Planning and Evaluation

Letter From Terry and Terry Schwantes

We are writing to you to express our concerns about funding for the NIH, more specifically the NICHHD. We are the parents of a five year old daughter who has Osteogenesis Imperfecta. Brianne has been involved in a protocol at the NIH since she was 8 months old. She has been in braces from her hips to her shoes since she was 12 months old and she has been swimming since she was 2 weeks old.

On April 9, 1980 Brianne was born. She was immediately baptized because her doctors could not imagine her living much more than a day. She had been broken thirteen times in utero. She had no skull, just a thick protective skin where her skull should have grown. Her suck was so weak that she had to be tube fed for her first week of life. Those first few days, she lay naked in an incubator. The nurses were afraid to dress or diaper her for fear they might break her again. When an orthopedic specialist gave us his prognosis, the future was very dark. She might break every bone in her body, some more than once. She would lose her hearing at puberty. Since she would never walk, we should look into a good wheelchair. Institutionalization was discussed and infanticide was even alluded to.

As concerned parents, my husband and I did everything that we could for Brianne in the way of Early Childhood Intervention. In fact we have wear marks in our carpeting were we sat for hours at a time rolling Brianne over or lifting her head or moving her body in ways appropriate for her age level. We poured over child development manuals, took graduate level classes in the field and kept meticulous notes on the physical development of other children her age so that we could help our child develop as close to normally as possible.

We began working with the NIH when we reached a point where the next step for Brianne was standing and walking. Her bones were just too weak to support her frame without some type of exo-skeleton. We had investigated the traditional treatment for OI, widely practiced by Shriner's Hospital for Crippled Children-intramedullary rodding. However, the whole concept of breaking the femur into a lot of pieces and shish-kebobbing it onto a metal rod was not only repulsive but by talking to parents of older OI children, we found out that one rodding surgery leads to another and another and that the benefits were at best minimal for some children compared to the debilitating and painful side effects that many children experience.

The validation for all of our hard work with Brianne came when we became involved with Dr. Lynn Gerber of the NIH under the direction of Dr. Michael Zasloff of the NICHHD. She had put together a protocol for young children with the severe form of congenital osteogenesis imperfecta that involved the use of ultra-lightweight polypropylene braces that would support the legs and at the same time allow them to experience partial weight bearing. The whole concept behind this protocol was that if the legs could be allowed to function in the way they were meant to by creating some type of outer support, the muscles would increase in mass and the bones would mineralize thus becoming stronger and hopefully less brittle.

Another very important offshoot of the bracing protocol was that the braces allowed the children to move about in a normal posture while providing limited protection of the long bones of the legs. For Brianne, this created an opportunity to attend a regular preschool in her own neighborhood among her peers, which is quite a difference from taking the Handi-Cab across town to a school for the Orthopedically Handicapped and spending the better part of her life wheelchair bound.

On April 9, 1985 Brianne turned 5. She will be graduating from the Academy of Preschool Learning and attending a regular kindergarten at her neighborhood elementary school. She can swim several lengths of the pool at the local YMCA. She can ride a tricycle. She participates in almost every activity that other children her age can with the exception of jumping off the couch or sliding down a slide. Her peers have accepted her totally. She has established very normal relationships with her sister, cousins and the neighborhood children.

When considering the funding for the NICHHD for the next fiscal year, please take into account Brianne's story. She is a perfect example of how investing money in research can reshape childrens lives to allow them to achieve their potential while creating a large return on the initial investment. The cost of educating Brianne versus educating a conventionally raised OI child is tremendous not to mention all the other costs that the government can incur when they find themselves subsidizing a handicapped person's life.

No one can forecast what the future holds for Brianne but we all believe that if we lost her tomorrow, she lived a full life as a regular kid on the block who wore braces, and not as that crippled kid who needed pity.

Sincerely yours,

Terry and Terry Schwantes

STATEMENT OF HAROLD A. KAMINETZKY, M.D., FACOG, DIRECTOR OF PRACTICE ACTIVITIES, AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

The American College of Obstetricians and Gynecologists (ACOG) is an organization of over 25,000 physicians specializing in the delivery of health care to women. We respectfully submit the following comments for the record.

The ACOG supports adequate funding for the National Institute of Child Health and Human Development (NICHD) in order to enable that entity to pursue new research initiatives of vital importance to mothers and children.

The NICHD has undertaken a major new initiative dealing with the prevention of low birthweight, the leading cause of infant mortality. In addition to research on the causes of low birthweight, including intrauterine growth retardation and premature labor, there are plans to launch a network of six to ten leading obstetric maternal-fetal medicine units to facilitate conducting clinical trials using common research protocols.

The second major proposed initiative is in the area of contraceptive research and development. The ACOG is also interested in this area of research, inasmuch as more than half of all pregnancies in the United States are reported by women to be unintended. New methods of contraception are needed which are safe, effective, inexpensive, and easily accessible in order to improve voluntary control of reproduction.

NICHD's professional judgment is that it would take $347 million in fiscal year 1986, or a 10.7 percent increase over last year's budget, in order to maintain the existing level of research, as well as undertake these new initiatives. We support this increased funding level as a worthwhile, long-term investment in the health of America's women and children.

STATEMENT OF E. MAVIS HETHERINGTON, PH.D., PRESIDENT, SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT

Mr. Chairman and members of the Subcommittee, I am Dr. Mavis Hetherington, President of the Society for Research in Child Development (SRCD). The SRCD is a national research association of scholars from disciplines within the field of child development, including, for example, psychologists, educators, pediatricians, nurses, and sociologists. The organization is dedicated to the promotion of knowledge related to children, with particular emphasis on the social, psychological, and biological factors that foster or impede healthy development.

I appreciate the opportunity to present testimony on behalf of a number of research organizations regarding the FY86 appropriations for the National Institutes of Health. My statement will focus on the significance of the research activities of the National Institute of Child Health and Human Development (NICHD), one of the 14 agencies comprising the National Institutes of Health.

The NICHD was established in 1962, and its mission, as set out by Congress, is to promote the healthy development of children, from the prenatal period into adulthood. Through research on the reproductive, biological, and behavioral processes that determine the health of children, adults, families, and populations, NICHD advances and disseminates knowledge that will enable every child to fulfill his or her potential for a healthy and productive adult life, unimpaired by physical or mental handicap. The NICHD is the sole federal agency devoted to this endeavor, and its reputation is unparalleled in other nations.

To meet its objectives, NICHD directs a research program that awards grants and contracts to universities, medical schools, and other institutions in the United States. Research is also conducted at laboratories on the NIH campus in Bethesda, Maryland.

Three qualities contribute to the outstanding performance of NICHD:

(1) The enormous breadth of topics examined. NICHD supports research on numerous areas related to human development. Current emphases include: normal and high-risk pregnancy and birth; congenital anomalies; Sudden Infant Death Syndrome; infant, childhood, and adolescent nutrition and endocrinology; intellectual and emotional development in children and adolescents; injury prevention; prevention and amelioration of mental retardation; contraceptive development and evaluation; fertility and infertility; and population dynamics, such as

teenage pregnancy and childrearing and changes in family and household structure.

(2) The interdisciplinary approach to understanding development. An accurate understanding of human development emerges only from an interdisciplinary approach. NICHD places high priority on multifaceted investigations of problems, emphasizing the interaction among biomedical and psychosocial factors. For example, the problem of smoking during pregnancy is of national concern, since smoking is associated with a reduction in birthweight, and an estimated 20-30% of pregnant women in the United States smoke. NICHD has the expertise and resources to address the complexity of this issue, and it funds studies involving numerous scientific disciplines: the biochemical effects of smoking on the cardiovascular, respiratory, endocrine and genitourinary systems of pregnant women; the impact of smoking and its cessation on fetal growth retardation; the origins of smoking as a life-style among adolescents, and its relationship to nutritional patterns and socioeconomic status; the development of risk-taking behavior in children. This array of research projects illustrates the necessity for an interdisciplinary approach to the study of health --a complex and sizable endeavor that warrants an institute of the calibre and magnitude of NICHD.

(3) The emphasis on the prevention and amelioration of problems in development. All of the research activity of NICHD is devoted toward one goal: the growth of knowledge that can be used by parents, practitioners, (such as doctors, nurses, educators, psychologists), and policymakers to understand development and to prevent or ameliorate developmental deviations. Due to the research activities of NICHD over the past 20 years, numerous advances in knowledge have had an impact on the lives of children and families in the United States. For example, NICHD has contributed to the study of children with phenylketonuria (PKU), an inborn condition that is associated with severe mental retardation, behavioral problems, epilepsy and other neurological impairments, usually necessitating life-long institutionalization.

Findings from this research have led to early screening and detection of the problem and the design of treatment involving a special diet until age 6, resulting in the prevention of mental retardation and associated problems in PKU children. Treated PKU children have attained normal levels of intellectual development. Families have been spared the anguish of mental retardation, and the economic savings to society have been dramatic. Current NICHD-sponsored research is investigating whether it is safe to discontinue the special diet at age 6. The research on PKU is but one example of the cost-effectiveness in both human and financial terms that has been brought about by scientific advances.

It is impossible within these time constraints to do justice to the extraordinary range of scientific inquiry chartered by NICHD. Instead, I will present two recent initiatives as illustrations of the pioneering work of the institute:

(1) Low Birthweight Prevention Research Initiative. A major cause of infant mortality in the United States is low birthweight, and those low birthweight babies who do survive are more likely to experience health problems than normal birthweight babies. Although infant mortality has been reduced by 50% in the past 15 years, this has been due primarily to the increased survival rate of low birthweight infants through improved life-saving technological advances, and not to a reduction in the number of low birthweight babies *per se*. In 1981, 6.8% of babies born in the United States were low birthweight, a rate that is higher than that of 11 other developed nations.

The Low Birthweight Prevention Research Initiative began in 1985 and will continue in 1986. The focus is on an examination of the physiological and biochemical processes that promote normal intrauterine growth and that initiate and maintain normal human labor. Improved knowledge of these biological processes will facilitate a better understanding of the impact of such factors as socioeconomic status, age, race, medical and obstetrical history, nutrition, alcohol use and smoking, and stress on fetal development and the course of pregnancy. The prevention of low birthweight is a top priority at NICHD. Findings from this research will have enormous impact on the health of our population.

(2) Initiative on the Impact of Divorce, Single-Parenting and Step-Parenting on Children. Recent statistical models have predicted that 38% of first marriages of young women who married in the late 1970's will end in divorce. Of those who do divorce, three out of four women and five out of six men remarry, 50% within 3 years. Sixty percent of all divorces involve children.

Given indications that divorce, single-parent families, and stepfamilies are increasingly common circumstances in the lives of contemporary American children, the NICHD convened an initiative conference on this topic last week. The purpose of the conference was to ascertain the state of our knowledge and to outline areas where additional research is needed. For example, leading scholars summarized and presented findings on the impact of divorce, single-parenting, and step-parenting on the emotional and cognitive development of children and adolescents, with special emphasis on sex differences, longterm effects, racial/ethnic variations in living arrangements, and changing concepts of custody. Other presentations compared the behavioral problems, school performance, and use of mental health services by children in two-parent, single-parent, and stepfamilies. A number of gaps in research were highlighted: the meager knowledge we have on divorced, single-parent, and step-parent families from various ethnic groups; the lack of information regarding the different ways these events affect children of different ages; the need for research on the links between parental divorce and children's subsequent relationships with peers and spouses; and the striking need for more research on stepfamilies.

In summary, Mr. Chairman, the NICHD is working successfully and effectively to fulfill its mission. To continue its work, however, the NICHD must be funded at a reasonable level of operation. We are in agreement with other scientific organizations that NICHD should be funded for FY86 at $347.2 million, an increase of slightly more than 10% over the FY85 level. We are opposed to the Administration's proposal to reduce funding for NICHD by 6.4%.

As I have illustrated, the funds that you appropriate will support research on the critical interactions among the biological, psychological, social, and environmental factors that determine the course of human development. The funds are allocated within NICHD by mechanisms that reflect considerable deliberation and planning to take advantage of scientific developments and to address the most pressing health problems. An increased appropriation of $347.2 million for FY86 will be a wise investment in our nation's future.

NATIONAL EYE INSTITUTE

STATEMENT OF JOHN McCANN, EXECUTIVE DIRECTOR, AFFILIATED LEADERSHIP LEAGUE, FRIENDS OF EYE RESEARCH

Senator WEICKER. Next we move to the National Eye Institute. Our first witness is John McCann, executive director, Affiliated Leadership League, Friends of Eye Research.

Mr. McCANN. Mr. Chairman, I thank the committee for this opportunity.

Senator WEICKER. John, nice to have you here.

Mr. McCANN. My name is John McCann. I am the executive director of the Affiliated Leadership League of and for the blind of America. I am here today on behalf of Friends of Eye Research, a nationwide coalition of organizations representing some 25 million people who are deeply concerned about eye research funding for 1986 as well as the attempts of the present administration to reduce that figure with respect to grants already involved in fiscal 1985.

We urge the committee to stand firm for 6,500 grants for NIH in fiscal year 1985 as originally agreed. We also stand with you in resisting attempts of the present administration to devastate the hopes of many blind or visually impaired persons by permitting multiyear funding of 628 of these grants, 38 of which are with the National Eye Institute.

Despite major advances in the treatment of eye diseases, NEI has estimated that the cost of visual impairment and blindness in the economy is some $16 billion. This is the cost in terms of medical bills, hospital bills, research, rehabilitation, and subsidy payments to needy blind persons and other costs too numerous to mention here.

Yet, this cost would be infinitely higher were it not for advances made possible in research done at the National Eye Institute. As charts appended to my testimony indicate, the projected savings which can reasonably be expected to accrue from the research to be done in the years immediately ahead far outstrip the $215 million which we are advocating and requesting for investigation research in 1986.

Gentlemen, I was recently at the National Eye Institute as part of a tour of its facilities. I did this last April 8. As a person whose eyesight was destroyed by congenital glaucoma, I was most impressed with recent advances in treating this disease that I witnessed there at the center. I learned about new methods of treatment using sonar beams and laser beams to reduce interocular pressure.

The significance of this research development can be gleaned when you consider there are 1.2 million cases of glaucoma in this country, with another 1.2 million, roughly one-half, we determine, are undetected. The significance is again apparent when you consider there are some 10 million Americans who have elevated interocular pressure which can and I guess in many situations does lead to glaucoma.

I think we can be very hopeful of the research that is going on here. I look forward to its continuation.

Another problem in the field of vision relates to the elderly population. With people living longer, we have a higher incidence of eye disease, particularly macular disease in the older population. The Krypton laser I saw at NEI is of great assistance in reducing vision loss due to diseases of the macular, which is part of the retina. The highest incidence of blindness among the elderly involved is the retina. Yet, four out of five cases cannot presently be helped.

The eye research component is second in budget percentage relating to this area and so I therefore think we can look forward to some material advances in the treatment of diseases of the macular and other retinal disease.

While at the National Eye Institute I also learned more about winning the war against cataracts. We presently do approximately I believe it is 500,000 operations for cataracts. We are on the threshold of eliminating many cataracts altogether or delaying them at least for a period as long as a decade. Nevertheless, despite these research advances, still more needs to be done in this area.

My testimony would not be complete without discussing great strides being made in the treatment of a particular infectious inner eye condition that is responsible for 5 to 10 percent of the blindness in this country. Scientists have developed Cyclosporin which is a drug used in treating uveitis.

Again, the research is promising, but more needs to be done to eliminate this cause of blindness.

Distinguished members of the committee, I am here to urge that the level of $215 million be maintained as an appropriation for eye research funding for fiscal year 1986. There is a proposed budget which would cut this figure by $17 million. This would have a devastating effect on both the blind or visually impaired population or those at risk of becoming part of that population. Just how devastating this effect would be is made clearly manifest in the charts appended to the testimony which you have before you.

The appropriation of $215 million is consistent with NEI's 5-year plan and the midcourse correction made to that plan by scientists in the extramural community. More importantly, maintaining this level of funding will cause people like myself never to abandon hope that new breakthroughs are possible and they will occur.

If you have any further questions, I would be happy to answer them at this time. Again I thank the committee for this opportunity.

Senator WEICKER. Thank you for making the effort to be here.

Senator HOLLINGS. We appreciate your presence. When did you lose your eyesight? I am getting educated about glaucoma. I thought it was for us old folks.

Mr. MCCANN. Senator, you are correct. It most often occurs after the age of 40. One is advised to have routine screenings for it.

But there is a congenital form of it which, as I indicated, was responsible for 7 percent of admissions to schools to the blind, which is the information I had a decade ago. I came up in a generation when there were a lot of premature babies. However, the point I am making is you don't often see it in a congenital form, but certainly it does occur. I had sight loss essentially from birth, although there was a retention of some vision until the age of 4.

Senator HOLLINGS. Thank you.

Senator WEICKER. Thank you very much.

Thank you very much, John, and we will take a very careful look at these matters. I guess $17 million is the figure you feel you fall short here; is that correct?

Mr. MCCANN. That is correct.

Senator WEICKER. It is absolutely incredible to me we spend all our time on that floor talking about star wars and MX's and B-1's and Tridents and the whole variety of death and destruction up there, and yet we have to sit here and scrounge for $17 million for people like John and people that have problems with their eyes. I don't know what is going on in this country, but I think it is time some people woke up. And the next time they have a friend or member of their family that is afflicted or dies, instead of, as they say in the obituaries, in lieu of flowers, send contributions, in lieu of flowers, send a message to the President and Congress as to what the contributions would be.

Mr. MCCANN. I am happy to lend a hand. I know you have been a staunch supporter of it, and I know you will continue in that tradition.

PREPARED STATEMENT

Senator WEICKER. Thank you. We will place your statement in the record.

[The statement follows:]

STATEMENT OF JOHN McCANN

I am John McCann, Executive Director of the Affiliated Leadership League of and for the Blind of America. I am here today representing Friends of Eye Research, a nationwide coalition of organizations that represent some 25 million Americans who are deeply concerned about eye research funding for 1986, as well as attempts by the Administration to thwart what Congress already has appropriated for fiscal 1985. We urge members of this forwardlooking subcommittee to stand firm on 6500 new and competing grants for NIH, as originally agreed for fiscal 1985. We stand with you in also resisting attempts to destroy the hopes of millions of visually impaired and blind people by permitting multi-year funding of 628 of these grants--including 38 at the National Eye Institute.

Despite major research and treatment advances, the National Eye Institute reports that blindness and other forms of incapacitating vision loss annually drain some $16 billion from the U.S. economy. That is what it costs in medical-hospital bills, time lost from work, direct assistance payments by government to the needy blind, plus other expenses too numerous to mention here. At the same time, the savings already made possible through progress in research and treatment have kept this $16 billion figure from being much higher. As the accompanying chart indicates, projected savings made possible by eye research over the years immediately ahead far outstrip the $215 million Citizens Budget which Friends of Eye Research and other leading organizations advocate for fiscal 1986.

Gentlemen, I recently had an opportunity to visit the National Eye Institute, as part of an openhouse and tour of its clinical laboratory facilities. As an individual whose sight was destroyed by glaucoma, I was impressed by new treatment advances made possible through NEI-supported research.

For example, I learned about new techniques--using ultrasound beams and lasers--that make it possible to drain fluid pressure within the eye before there is irreparable optic nerve damage resulting in blindness.

These new breakthroughs are particularly important when you consider that there are about 1.2 million known glaucoma cases in the U.S., with an equal number undetected. The problem is compounded when you consider that some 10 million of our fellow citizens have elevated intraocular pressure that can lead to glaucoma. Many of them still could not be helped by present knowledge or treatment.

Aging-related eye diseases are growing at a rapid rate because people are living longer and contracting problems, particularly in the retina. Even here, the recently developed Krypton laser is helping some victims of macular problems--salvaging precious sight used in reading or performing other important detail tasks. Nevertheless, it still is not possible to help four out of five victims of macular disease.

Because the Eye Institute ranks second at NIH in budget percentage devoted to neuroscience, we can look forward to unraveling the mysteries surrounding many serious eye problems, particularly related to our Senior Citizen population. Perhaps, that is why NEI has earmarked about two-thirds of its budget for these still-unsolved eye disorders affecting our aging population.

During my visit to NEI, I learned more about winning the war against cataracts. Indeed, we are on the threshhold of preventing certain types of cataracts altogether or at least inhibiting growth for up to a decade. With more than a half million cataract surgeries annually in this country, think of what this will save in human suffering and dollars. Although promising, we still need substantial funding to accelerate research progress against cataracts.

My testimony would be incomplete if I did not mention NEI-sponsored research that has lead to more effective treatment for an infectious inner eye condition responsible for 5%-10% of all U. S. blindness. Scientists have developed cyclosporin as an effective agent against uveitis. Cyclosporin also holds new hope for victims of other autoimmune diseases, according to NEI.

Gentlemen, these are just some of the compelling reasons why eye research must maintain its momentum in this fiscal year and the one ahead. Administration plans to cut present funding levels by some $17 million or more would be devastating. Just how devastating--even on fiscal 1986 levels--can be seen from the accompanying charts. We thus urge you to consider a budget of $215 million for NEI in fiscal 1986. This is compatible with the NEI 5-year plan and the midcourse correction of that plan recently completed by distinguished eye research scientists in the extramural community.

A $215 million budget will permit funding of R01 grants at a continued high level, enabling eye research centers across the nation to update facilities and equipment. It also would bring renewed hope to those blind or severely visually impaired individuals such as myself who will never abandon hope for new breakthroughs in research and treatment.

SOME ECONOMIC SAVINGS IN THE UNITED STATES
RESULTING FROM EYE RESEARCH

I. CATARACTS

Improved surgical techniques have further reduced the length of hospitalization for cataract surgery in just the past 5 years by 3 or more days.

3 days X $275/day hosp. costs X 500,000 cataract operations/year =

$400,000,000 saved annually in hospital costs

Further biochemical research sponsored by NEI may make it possible to delay the need for cataract surgery by up to 10 years, resulting in

$600,000,000 saved annually in medical costs

II. GLAUCOMA

Laser treatment of "angle closure" glaucoma results in savings of hospital costs, surgeon's fees, and lost income of approximately $2,500.

$2,500/patient X 30,000 laser treatments annually in the U.S. =

$75,000,000 saved annually through laser treatment

Nearly 500,000 glaucoma victims cannot be treated with the usual glaucoma drugs. Further NEI-sponsored research may result in new drugs, eliminating the need for surgery treatment, and resulting in

$50,000,000 saved annually in medical costs

III. CORNEA DISEASES

Better understanding of the structure of the cornea, and improved surgical techniques have made sight-saving corneal transplants better than 90% successful.

15,000 transplant operations/year X $25,000 to maintain a blind person =

$375,000,000 saved annually in care of cornea patients

Current NEI-sponsored studies of herpes simplex infection of the eye, the leading infectious cause of cornea damage in the United States, holds promise for new drugs to completely cure the disease, resulting in

$75,000,000 saved annually in medical costs

Compare these savings to the Citizens Budget for the National Eye Institute of only

$215,000,000 for FY1986

STATEMENT OF STEPHEN J. RYAN, PROFESSOR AND CHAIRMAN, DEPARTMENT OF OPHTHALMOLOGY, UNIVERSITY OF SOUTHERN CALIFORNIA SCHOOL OF MEDICINE

Senator WEICKER. The next witness is Stephen J. Ryan, professor and chairman, Department of Ophthalmology, University of Southern California School of Medicine.

Dr. RYAN. My name is Dr. Stephen Ryan. I am professor and chairman at the University of California in Los Angeles. My written testimony is before you. I would like to highlight a few aspects.

Forgive me, Senator, but after your interchange with Dean Rosenberg on the subject of ontogenes, I wondered if you would be interested in looking at that article which was written up in the Wall Street Journal last year.

I am here today to present the fiscal budget for 1986 under the auspices of Research to Prevent Blindness. I am pleased to address this committee on a matter of national concern, blindness. As a direct result of your support for the National Eye Institute, sight is being saved and vision restored to thousands who once would have been hopelessly blind.

Congress has, with wisdom and foresight, provided increasing financial support for vision research. The National Eye Institute has been guided by a series of 5-year plans which represent the consensus of the best scientific minds from all across the country.

Our current plan, this plan, is the result of the work of over 350 scientists from all around the country. So it is a national consensus for prioritized funding within the National Eye Institute.

The National Advisory Eye Council asked me to chair a subcommittee to look at a revision and evaluation of this plan. We found this plan to be right on target. I am pleased to present to you today our recommendation, just as Mr. McCann did, that you appropriate $215 million to the National Eye Institute for fiscal year 1986 according to this prioritized plan.

Vision research has proven to be a very good investment. For example, the diabetic retinopathy trial, which evaluated and determined the successful useful standard of laser in this condition, that cost $10 million. The treatment developed as a result of this trial in diabetes saves $454 million a year to this country.

Another example is the one that was cited by Mr. McCann, the macular, and use of the Krypton laser and argon laser. That treatment results in an annual savings of $57 million. Yet it only cost $1.5 million for that trial. So vision research is indeed cost-effective.

Senator WEICKER. Will you repeat those figures? These are figures people should know about.

Dr. RYAN. The diabetic laser trial cost $10.5 million. The use of the laser in this condition results in an annual savings related to diabetes, 60 percent of those patients, an annual savings of $454 million.

Senator HOLLINGS. How do you compute that, Dr. Ryan?

Dr. RYAN. I would have to tell you, Senator Hollings, this is done through the National Eye Institute and it is based on if you allow that diabetic patient not to be treated with a laser, that patient will develop a vitreous hemorrhage of the macular. Then that patient will have a much lower chance of success from surgery. It is better to prevent it. Then what you have to do to care for these visually handicapped patients. The care that is given in that regard, it is phenomenal what it takes in terms of not just human suffering but the real condition of dollars and cents.

Senator HOLLINGS. That is $454 million we spend without that treatment.

Dr. RYAN. That is correct. If you think of macular degeneration as another example, as another set of numbers, that is $1.5 million it cost to do that trial, and by applying that 75 percent of Americans treated with this condition, those individuals, that will save again in a similar cost breakdown $57 million a year. So it is really cost-effective.

I would just like to underscore successful vision research occurs when you have well-trained, talented investigators who have the resources, financial support and recognition.

The single most important item in my testimony, according to the organizations that I represent—ARB, American Academy of Ophthalmology—is the issue of multiyear funding. All of us are deeply concerned about the potentially catastrophic and long lasting effects of multiyear funding as proposed by the administration. The proposed NIH cut from 6,500 to 5,000 grants would result in a loss of proportionately more research teams to vision research than any other Institute at NIH. Maintenance of the fiscal year 1985 budget as passed by and according to the intent of Congress remains our top priority.

In my written testimony I have attempted to briefly give you an impression of the breadth and importance of NEI research. Clearly this research program is cost effective in terms of dollars and improvement of the human condition. It represents a national consensus. It is poised on the brink of major accomplishments in each of its program areas.

I greatly appreciate the opportunity to deliver this testimony. I would be pleased to answer any questions on any aspects of the budget.

Senator WEICKER. Has anybody figured out, Dr. Ryan, the savings vis-a-vis economic costs of cataract surgery being performed by lasers on sort of an in-and-out basis, compared to going in the hospital for days on end?

Dr. RYAN. Yes, Senator Weicker. I think with the exploding cost—and talking about the cost of health care, anything we can do to hold down the cost of health care we all want to do and subscribe to. Since these changes occurred over the course of the last 10 years, we now can say that cataract surgery is moving rapidly to become outpatient surgery. Indeed, in California it has been mandatory by Medcal, our equivalent to Medicaid, that it be done only on an outpatient basis for more than 18 months now. If we project these 800,000 lens implants performed in the country in this year, according to the FBA numbers, if those are all done on an outpatient basis, as they soon will be, the annual savings is in excess of $500 million. So that is doing something very concrete to try to hold down the cost of health care.

Senator HOLLINGS. That is the practice now, to do it as an outpatient.

Dr. RYAN. Yes, Senator.

Senator HOLLINGS. In other words, there is no need for hospitalization as a general rule.

Dr. RYAN. That is correct, Senator.

Senator HOLLINGS. You say that is in California. How about here on the east coast?

Dr. RYAN. I would say it is rapidly moving that way across the country. I know that there are surgeons certainly in South Carolina and in Connecticut and I think throughout the east coast who favor outpatient surgery.

Again, in addition to the cost savings, there is the practical aspect that we believe that families and patients are much better off being cared for in their own home, in a supportive environment, as opposed to sometimes an impersonal situation in a hospital, comparatively speaking.

Senator WEICKER. Thank you for your testimony.

Dr. RYAN. Also, on the matter of eye disease in children, a new class of human cancer genes is involved. That work is really exciting, Senator Weicker. I only bring it up because it takes off directly from what you and Dean Rosenberg were talking about. There was no way of doing that. It is only because of what has been done in basic research. It just underscores your excellent point it is a continuum and it is not subject to rapid starts and stops in terms of an overall research effort.

We greatly appreciate, the entire scientific community, vision research in particular, what you and Senator Hollings have done for the support of vision research over the years in the face of significant obstacles. We appreciate it deeply.

Senator WEICKER. Thank you very much.

Senator HOLLINGS. Can I ask, you represent what groups again?

Dr. RYAN. The Research to Prevent Blindness, a voluntary organization supportive of research; American Academy of Ophthalmology, which supports the 13,000 ophthalmologists throughout the country; National Advisory Eye Council, made up of 12 individuals who are appointed for 4-year terns to oversee the activities of the National Eye Institute.

Senator HOLLINGS. That seems like quite a group. Who is opposed to you? Do you have any dissident groups? I know who is opposed to us here. [Laughter.]

Dr. RYAN. There is an administration budget and OMB and then there is this committee we look to. But there are not groups of ophthalmologists or other people.

Senator HOLLINGS. There is nobody out there demonstrating. That is what I was wondering. [Laughter.] We are not used to any unanimity.

Dr. RYAN. We had a meeting in Atlanta on March 20, with Mr. McCann's organization, with Dr. Farro and Friends of Eye Research. We all met. This is a consensus we have derived of all the organizations supporting vision research.

Senator HOLLINGS. Mr. McCann testified about preventing cataracts or slowing them down. How do you do that?

Dr. RYAN. At the intramural program of the National Eye Institute, Dr. Ken Asheta, one of the premier basic researchers, has identified an enzyme that seems causative related to certain types of cataracts. This leads to a national evolution of research. I am not saying the answer is here today, but I am saying that is closer than, for instance, retina blastoma was 10 years ago. Identifying this enzyme gives us a window to look and then decide just how does a cataract develop. Then once you know that, you start manipulating again with the tools of mollecular genetics on how you affect the disease.

Senator HOLLINGS. Do you as a group sort of oversee or monitor or in any way look at the operation of the Eye Institute itself, and what is your reaction?

Dr. RYAN. Very carefully we do that, Senator Hollings. This is particularly in my role as chairman of the Subcommittee of the National Advisory Eye Council.

In reviewing this document, we convened panels from around the country for each of the five program areas. We took half who had participated in it and we took another half who had not, so we would get the mix of what was going on. What we then did was to look at this document. It is even used as an educational document by some organizations; it is that good a document. We tuned it up and all I can tell you is we have a prioritized plan and we can say to you with X amount of money we can do Y amount of research. So it goes right down the line prioritized-wise.

I am clearly biased, but I have to say the National Eye Institute is an extremely well-managed and well-run Institute. It truly is. I know this from my supervisory role with the Council.

Senator HOLLINGS. At the time you were convening, were you all talking about we are short of money here in Washington?

Dr. RYAN. We did hear about that, Senator. Again, I think Senator Weicker has addressed this issue in a much more eloquent and appropriate manner than could I in terms of priorities in a budget.

Again what we do is try to say we understand the financial constraints and we understand the situation under which the Congress is operating, but what we point out is whatever amount of money you apply to the National Eye Institute, this is prioritized, we can give you a very strong justification. This is no wish list. You can imagine with 350 scientists around the table and everybody's ox is getting gored, when you get into that situation of prioritized, we are dealing with reality and what can be done in clinical and actual research.

Senator HOLLINGS. Thank you.

PREPARED STATEMENTS

Senator WEICKER. Thank you, Dr. Ryan. Your submitted statement in its entirety will be placed in the record at this point along with other statements for the record on appropriations for the National Eye Institute.

[The statements follow:]

STATEMENT OF DR. STEPHEN J. RYAN

Background Information

Stephen J. Ryan, M.D., is the Beardsley Professor and Chairman of the Department of Ophthalmology at the University of Southern California School of Medicine and the Medical Director of the Estelle Doheny Eye Foundation. He currently serves as a member of the National Advisory Eye Council of the National Eye Institute and is Chairman of the Subcommittee on the Mid-Course Evaluation of the Institute's Five-Year Plan (1983-1987): A National Plan for Vision Research. He is a Director of the American Board of Ophthalmology, a Trustee of the Association of University Professors of Ophthalmology, and a Delegate of the Council of the Pan-American Association of Ophthalmology. He is a Fellow of the American Academy of Ophthalmology and received its Award of Merit in 1975. He has long-standing involvement with and support of the objectives of the National Eye Institute. He has served on the Visual Sciences Study Section from 1975 to 1979. In addition to his administrative, teaching, and patient care responsibilities, he is actively involved in research programs, both in the clinical setting and in the laboratory. He is Principal Investigator for one clinical trial and Co-Investigator for two other clinical trials for retinal diseases including diabetes. Dr. Ryan received the Research to Prevent Blindness Louis B. Mayer Scholars Award in 1973 for his research in macular degeneration, which work continues in his laboratory and is currently sponsored by the National Eye Institute.

My name is Dr. Stephen Ryan. I am Medical Director of the Estelle Doheny Eye Foundation and Professor and Chairman of the Department of Ophthalmology at the University of Southern California in Los Angeles. I am here today to present the Citizens' Committee Budget for Fiscal Year 1986 under the auspices of Research to Prevent Blindness (RPB), the world's leading voluntary organization in support of vision research. Thank you for the opportunity to address this Committee on a matter of national concern; blindness. As a direct result of the support this Committee has given to the National Eye Institute, sight is being saved and vision restored to thousands who once would have been hopelessly blind.

The American public fears blindness second only to cancer, according to two Gallup polls conducted more than a decade apart. In addition to the human tragedy, blindness costs the American people more than $14 billion a year.

For more than a decade, Congress has, with wisdom and foresight, provided substantial financial support for vision research. As you know, the National Eye Institute has been guided by a series of Five-Year Plans which represent the consensus of the best scientific minds from all across the country. Our current Plan for the years 1983-1987 is the result of the hard work of over 350 scientists and specifies in detail a systematic approach to funding priorities for the National Eye Institute. Last year, the Program Planning Subcommittee of the National Advisory Eye Council began a review of the Five-Year Plan as part of a Mid-Course Evaluation and Revision to reflect new research developments and political realities. It is my pleasure to serve as Chairman of this Subcommittee.

To begin this review we convened panels of experts in each of the five specific program areas related to eye disease. Half of the panel members had participated in the original development of the plan, whereas the other half were new to the process and provided a fresh outlook. We charged these panels to review the recommendations of the Plan, to evaluate how well recent awards follow the Plan's priorities, to identify new areas of opportunity that need additional emphasis, and to recommend corrective action to the Council.

As a result of this review, the Panels and my Subcommittee are convinced more than ever that this Five-Year Plan is a thoughtful, carefully worked out document of wisdom and substantial prescience. The Plan has such depth that some panels found that the document had achieved wide use as an educational summary. The Eye Institute has followed the guidance of the Plan and has had outstanding success in attracting research to the targeted areas. I cannot emphasize too strongly that the vision research community is most pleased with, and supportive of, the Eye Institute and the leadership of the Director and staff. Indeed, most of the senior vision scientists of this country readily contribute their time and efforts to it, for upon the success of the National Eye Institute depends the success of our research efforts.

Before discussing the 1986 budget proposal, however, I would like to make a few comments concerning the National Eye Institute and its programs.

- The NEI was chartered by Congress to improve the prevention, diagnosis and treatment of blinding eye diseases and other disorders of the visual system.
- The National Eye Institute supports 80% of all vision research in the United States.
- Blindness can be measured in terms of both human suffering and its tremendous drain of the health resources of the nation.
- The National Eye Institute is currently supporting laser trials in Glaucoma, Macular Degeneration, and Diabetic Retinopathy.
- Neuroscience and molecular genetics are the fastest growing and most exciting areas of research at the National Institutes of Health.

- Further, among all the Institutes the Eye Institute is in the best position to immediately take advantage of the numerous opportunities these fields have opened toward the conquest of diseases.
- The Intramural program of the National Eye Institute supports complex collaborative projects involving research teams difficult or impossible to assemble in a university.
- More than ten million Americans have irreversibly impaired visual disorders.

Vision research has proven to be a good investment. For example, the Diabetic Retinopathy Trial, which established the current successful standard for use of the laser in this condition, cost $10.5 million. The treatment developed as a result of this study reduces the incidence of blindness from this condition by 60 percent at an annual saving of $454 million. As a second example, a recently completed study of the use of the argon laser in the treatment of macular degeneration-- the leading cause of blindness in the elderly--demonstrated that its use will be successful in delaying the onset of blindness in 75 percent of Americans with disciform macular disease. This treatment will result in an annual saving of $57 million, yet the study cost only $1.56 million. Vision research is indeed cost-effective.

Successful vision research results when well-trained, talented researchers have financial support and recognition. It is the top priority of the organizations I have the privilege of representing today, to impress upon you our strongest belief that the Fiscal Year 1985 Budget must be maintained as it was intended when it was passed by Congress. We are all deeply concerned about the potentially catastrophic and long-lasting effects of the Administration's proposed multiple-year funding scheme. The proposed cut in National Institutes of Health grants from 6,500 to 5,000 would result in a proportionately greater loss to vision research than to any other institute of the National Institutes of Health. If you accept the Administration Budget which calls for future-year disbursements of the 1985 Budget, many vision research teams will be lost to vision research.

The programs being cut include competing renewals from researchers that received high priority scores in peer-review. The scientists involved are, for the most part, full-time researchers without other support. How can we attract our most talented young people, those who have the most career opportunities, into a profession that cannot promise stability or recognition? We urge you not to cut off this wellspring of young scientists and physicians by agreeing to this dangerous, precedent-setting action. We firmly suggest that this proposal for multiple-year funding is ill-conceived and hope that the opinion of the Comptroller General opposing this concept will prevail.

In turning to the proposed Citizens' Fiscal Year 1986 Budget let me say that it represents not a "wish-list" but, rather, the consensus view of the National Advisory Eye Council with the strong endorsement of Research to Prevent Blindness and the American Academy of Ophthalmology. This budget is our attempt to assist this Committee in as detailed a way as possible in determining a realistic and priority based budget for the National Eye Institute. We believe it to be of particular importance in this day of increasingly scarce resources to establish specific funding priorities and to constantly analyze developments in vision research-- and the support of these developments--in light of a systematic plan.

Research supported by the NEI is classified in five program areas: these include retina, cornea, cataract, glaucoma, and higher visual systems.

Over 750,000 Americans suffer from retinal disorders of such severity that they cannot read newsprint, even with glasses. Two hundred thousand are legally blind. Important advances in the retina program include new treatment methods for diabetic retinopathy, the leading cause of blindness for Americans under age 65, and macular degeneration, the leading cause of blindness for Americans over age 55. Retrolental fibroplasia (infant blindness due to the use of oxygen in incubators) is now the target of a clinical trial in centers throughout the country. Identification of the oncogene responsible for retinoblastoma, the most common eye tumor in children, is imminent. We can then devise more effective treatment and perhaps prevention of this deadly cancer of the eye. This important laboratory advance using the most modern techniques of molecular biology and molecular genetics promises to have great ramifications not only in ophthalmology but in the whole battle against cancer.

Corneal disease or injury afflicts 3.7 million Americans every year, resulting in 10 million office visits and one third of every dollar spent for eye care. The herpes virus is the most common cause of serious eye infection. Important advances in this area include improved methods of treatment of corneal herpes infection with drugs. Also, the intramural NIH program has recently developed methods for producing recombinant viruses. These may soon be widely used to produce effective vaccines against common viral infections such as herpes.

Uveitis, an inflammation of internal eye structures, accounts for about 10% of blindness. The disease involves the immunity system and an exciting Eye Institute study suggests that drugs used to suppress immune reactions in transplantation surgery are effective against uveitis. A multi-center clinical trial is now underway and may soon indicate a new breakthrough in our fight against this blinding disease.

Cataract extraction is the most prevalent surgical procedure in the United States. Research has made it so safe that there were more than 800,000 lens implants in the United States alone last year. More and more of these procedures are being done on an outpatient basis. Outpatient surgery will soon be the standard therapy procedure with an annual saving of over $500 million in the cost of operating rooms, hospital beds, and other financial burdens of hospitalization. A vast majority of these operations involve the simultaneous implantation of an Intraocular Lens. The success and wide use of the Intraocular Lens is an example of effective cooperation between the private sector--ophthalmologists, hospitals, and industry--and government agencies for the best and safest eye care for American citizens. Prevention of cataracts is a high priority program. The recent discovery that cataract formation is associated with a specific enzyme abnormality has spurred many workers into new studies in this field.

Glaucoma, or increased pressure in the eye, affects about 1.2 million Americans. Nearly sixty-two thousand of these Americans are legally blind. Glaucoma is a disease that can be controlled in most patients with medication. For those for whom medication doesn't work, however, the potential for treatment by laser offers great hope and is the subject of a current trial supported by the Eye Institute. This treatment involves the creation of a new drainage system for the eye and is based upon laboratory studies of fluid formation. In addition, Cytotoxic drugs currently being used to treat various forms of cancer are being tested in another multi-center clinical trial for their ability to prevent tissue scarring that limits the effective drainage of this system.

The NEI program in strabismus, amblyopia, and visual processing is best known because of the studies that were done on the physiological basis for amblyopia (lazy eye syndrome) for which the Nobel prize was awarded to Drs. Torsten Wiesel and David Hubel. Dr. Wiesel is a long-time NEI grantee and is a member of the Council's Program Planning Subcommittee. This Eye Institute program includes research on the optic nerve and optic neuritis, eye muscle problems, brain pathways, and central visual function, including visual perception as well as eye muscle problems. New research is evaluating the ability of brain cells to learn new functions or to regenerate in order to compensate for damage.

The Eye Institute program in neurobiology is second in scope only to that of the Neurological Institute. The retina of the eye is actually brain tissue. Many of the fundamental questions concerning the function of the brain are being studied in the retina. Sensory transduction (the conversion of light energy into nerve signals), neurotransmission (the way nerve cells talk to each other) and information processing (the integration of several nerve signals to generate a meaningful output) are all basic brain cell functions currently under study using the retina and visual system.

The 1986 Citizens' Budget represents the same consensus of senior scientists and National Eye Institute staff that produced the Five-Year- Plan. Every item in the budget has been the subject of careful scrutiny and is acknowledged to be of national importance. For example, support for the intramural program is essential since that program includes research in aspects of neurobiology, immunology, molecular biology and epidemiology, requiring resources beyond those of any other vision research group.

The training program in vision research at the National Eye Institute is particularly vital for young scientists. The current Administration budget calls for a reduction in the National Eye Institute staff from 163 to 144. Unfortunately this cut, approximately 12%, would have to be taken from young trainees because of government management realities.

Construction and renovation funds for university and other vision research institutes are also urgently needed. We in vision research have the same need to maintain physical plant equipment as does industry. In 1978, Research to Prevent Blindness determined the nationwide construction need to be $70 million. Through Fiscal Year 1985, however, only $8.3 million has been made available. This is an urgent problem that must be met with an appropriation of $10 million. Renovation funds are extremely cost-effective. They result in reclamation of space and increased efficiency. The private sector has generously supported construction of a large number of institutes throughout the country. The government, through the Eye Institute, should maintain its leadership position with matching funds as a stimulus for future projects.

In summary Mr. Chairman, our panels of experts and committees have worked hard to prioritize and update the areas of most critical importance to vision research. We have not identified just a dream, but, rather, are pointing out the very real opportunities for concrete progress in vision research. With this plan in hand we can in effect say to Congress and the public, "We can accomplish this much in vision research if you are willing to invest this specific amount of money." I have attempted briefly to demonstrate the breadth and importance of Eye Institute-supported research. It is apparent that our research program represents a national consensus, has been immensely successful to date, is cost-effective in terms of dollars and improvement of the human condition, and is poised on the brink of major accomplishments in each of its program areas. Proposed expenditure levels for each of these catagories are detailed specifically in the Financial Tables appended to my statement.

I urgently ask that this Committee recommend approval of the Citizens' Budget Request of $215,000,000 for the National Eye Institute for Fiscal Year 1986. I greatly appreciate the opportunity to present this testimony and I would be pleased to entertain any questions about any aspect of the Budget.

National Eye Institute
(Dollars in Thousands)

	1985 Current Estimate	1986 President's Budget	1986 Citizens Budget
Extramural Research			
Retinal and Choroidal Diseases..................	$68,697	$63,093	$79,690
Corneal Diseases..............	25,014	22,835	29,020
Cataract......................	13,399	12,232	15,540
Glaucoma......................	14,403	13,191	16,710
Strabismus, Amblyopia, and Visual Processing.....	31,767	28,951	36,850
Extramural Laboratory Renovation and Instrumentation Construction	3,300	3,300	10,000
Total, Extramural Research.....	156,930	143,952	191,000
Intramural, Laboratory, Clinical Research, Biometry and Epidemiology.............	15,832	14,859	18,000
Research management and program services..........	5,564	5,585	6,000
Total, Intramural Research.....	21,396	20,444	24,000
Total........................	178,326	164,396	215,000

National Eye Institute
(Dollars in Thousands)

	1985 Current Estimate	1986 President's Budget	1986 Citizens Budget
1. Grants			
Research Grants	134,599	121,410	155,288
Extramural laboratory renovation and construction, and instrumentation	3,300	3,300	10,000
Core and center grants	5,928	5,928	8,712
Individual training	2,528	2,616	3,506
Institutional training	2,703	2,615	3,494
Total Grants	149,058	135,869	181,000
2. Direct Operations			
Intramural laboratory and clinical research	14,582	13,609	16,600
Research and development contracts	7,872	8,083	10,000
Biometry epidemiology and field program	1,250	1,250	1,400
Research management and program Services	5,564	5,585	6,000
Total Direct Operations	29,268	28,527	34,000
Total NEI	178,326	164,396	215,000

STATEMENT OF MIKE GORMAN, EXECUTIVE DIRECTOR, NATIONAL INITIATIVE ON GLAUCOMA CONTROL

A year ago this Committee, stating that glaucoma is the leading cause of blindness in this country today, with an estimated five to six million people suffering from some form of the disease, directed the Institute to prepare a report on what steps could be taken to control the disease. The Committee report stressed the urgency of immediate action on two grounds: As the population ages, the percentage of people with glaucoma will increase sharply and, although most forms of glaucoma cannot be cured, early detection and treatment can arrest the progression of the disease and prevent blindness in many cases.

The Committee report emphasized three major areas where it believed progress could be achieved:

A. Much more precise figures on the epidemiology of glaucoma.

B. Clinical trials to develop the most cost-effective treatment methods for glaucoma control.

C. A health education and promotion campaign to inform the public about the dangers of glaucoma, disseminating information that will motivate them to seek early diagnosis and treatment.

The National Eye Institute, in its final report to this Committee, recommends an increased glaucoma allocation of $6,500,000 per year over the next five years as the minimum necessary to make a start on achieving these goals.

For fiscal 1986 the report recommendation is for $21,000,000 for glaucoma as against the $14,403,000 expended for it by the Institute in fiscal 1985.

EPIDEMIOLOGY

The report recommends four studies totalling $2,000,000 a year. It is somewhat critical of present mass screening efforts for glaucoma conducted by various private organizations. Instead, it recommends a concentration on those who are at highest risk for glaucoma (the blacks, the elderly, diabetics, people with high blood pressure, those with a familial history of glaucoma, etc.). This requires a determination of the number of people who become blind from each of the various causes of glaucoma blindness. This carefully planned set of epidemiologic studies should serve as a guide to where it would be most profitable to initiate control efforts.

An important ancillary of this effort would be the acquisition of epidemiologic data on what proportion of blindness from glaucoma results from delayed detection or, equally serious, non-compliance with physician advice and in what sub-populations this lack of adherence to therapy are most prevelant.

BASIC LABORATORY AND CLINICAL RESEARCH

The report recommends an increase of 15 research project grants a year over the next five years at a cost of $2,500,000 a year. This is a modest acceleration of the same pattern which the NEI has followed over the past decade or so. While grant support for individual investigator research is pivotal, we raise a point that the NEI, compared to its sister Institutes, devotes a preponderant amount of its money to individual investigator research. This kind of research is not unproductive, but it doesn't offer the opportunity to take a look at the big picture in glaucoma.

CLINICAL TRIALS

The report recommends two or three clinical trials totalling $2,000,000 a year over the five year period. In the present primitive stage of knowledge about the detection and treatment of glaucoma, it is most important that the Institute continue to pursue clinical trials in an effort to rate existing methods of glaucoma detection as to their effectiveness. There is really no consensus in the field of ophthalmology in this area. Until the NEI takes the lead in promoting clinical trials to determine the most effective methods of detection, this confusion will continue and people with undetected glaucoma due to faulty diagnosis will continue to go blind.

Our major criticism of the report is its lack of emphasis on the third goal which this Committee directed it to address -- a health education and promotion campaign.

One example will have to suffice. The Advisory Panel of distinguished ophthalmologists, who were called together to aid in the preparation of this report, devoted considerable attention to this problem. The Panel, headed by Dr. Douglas R. Anderson of the Bascom Palmer Eye Institute, constantly stressed the fact that the average physician shies away from glaucoma. I quote just one of many observations from the Anderson Report: "At present, detection of glaucoma by non-ophthalmic physicians in the course of a routine physical examination is rare. Physicians who are not ophthalmologists have little knowledge of glaucoma."

There are a number of things the NEI could be doing right now. For example, representatives of the National Initiative on Glaucoma Control in a meeting at the National Institutes of Health in connection with the American Academy of Ophthalmology, develop a simple educational program which could be presented to the American Academy of Family Practice, the American College of Physicians and similar professional groups. This recommendation does not appear in the final report.

We contend that until non-ophthalmic physicians are persuaded to include a simple ophthalmic test in connection with general physical examinations, we are seriously inhibited in carrying out the Senate's strong recommendation for a health education and promotion campaign. If the patient's doctor is not interested, what chance do we have to get our message across to the public at large?

NATIONAL INITIATIVE RECOMMENDATIONS FOR GLAUCOMA FOR FISCAL 1986

For fiscal 1986, the National Initiative recommends $22,403,000, which is an increase of $8,000,000 over the fiscal 1985 allocation for glaucoma in the Eye Institute budget.

We recommend that the major portion of the increase -- $5,000,000 -- be devoted to physician and general public education in the form of a health education and promotion campaign designed to increase detection of, and treatment for, this deadly disease.

As a secondary objective, $3,000,000 should be devoted to epidemiological studies to determine populations at high risk for glaucoma (the blacks, the elderly, diabetics, people with high blood pressure, those with a familial history of glaucoma etc.). Information gleaned from these studies will be the most cost-effective in targeting those groups of the population generally neglected in the present medical care system.

NATIONAL INSTITUTE ON AGING

STATEMENT OF ALVIN V. BLOCK, PRESIDENT, ESA, INC.

Senator WEICKER. We now move to the National Institute on Aging. Our first witness is Alvin Block, president of ESA, Inc.

Mr. BLOCK. Mr. Chairman and members of the committee, America is aging; 28 million people are over 65. About 1.2 million people over 65 are in nursing homes costing approximately $22 billion a year, which should increase to about 2 million people by 1990, at a cost of $40 to $50 billion a year. Who is going to pay the bill?

Alzheimer disease, the fourth leading cause of death, affects as many as 1 out of every 20 people over the age of 65. Statistically, this means that 5 out of the present 100 Members of the Senate may contract Alzheimer. There is no cure for Alzheimer, nor is the disease understood. The only confirming diagnosis occurs during autopsy, which is too late.

But just imagine. In less than 20 minutes with a single blood or urine test costing under $100 it might be possible to diagnose Alzheimers. I am talking about 5 years from now, when instrumentation developed and presently being used at ESA has been thoroughly tested and is a working system in its laboratory, which is a significant breakthrough in measurement technology.

It allows the determination of a single measure of 100 neurotransmitters. They send brain signals to the nerves which control the body and receive signals indicating its state of health. For the first time medical science has the capability to map the brain's chemistry at a single point in time by determining a profile of several hundred neurotransmitters. By evaluating this profile, we expect to find a neurochemical marker which is unique to a specjfic disorder and to monitor the progression of a disease and perhaps determine the mechanism of its progression. It should then be possible to develop a specific pharmaceutical or procedure for early therapeutic intervention.

We have been working primarily with NIH and NASA and medical researchers in Boston area hospitals. With researchers from McClean and Bedford Hospitals we found abnormalities in Alzheimers with transmitters that were previously unsuspected. Specifically, we identified an abnormal form of a neurotransmitter called serotonin.

In a paper for the AMA, the researchers are suggesting this abnormality may provide a root for the diagnosis of Alzheimers and, furthermore, that the abnormal compound may be a neurotoxin. Additional research is needed to determine whether this effect is specific to Alzheimers.

About 20 percent of the population will suffer from mental disorders at one time in their lives. In a study recently recorded in the New York Times, and I quote, "a high number of psychiatric patients at a New York hospital have been serious misdiagnosed * * * as many as 75 percent." There is clearly a need to diagnose behavioral disorders more accurately.

We are working with the Massachusetts Institute to develop a faster, more discriminatory test to classify forms of depression by profiling a number of neurotransmitters in a single scan. The initial results are promising. A proposal has been submitted to NIH.

With support from NASA, we found a specific neurotransmitter pattern related to nausea and space motion sickness.

The national cost of health care is approximately $350 billion per year. The ability to provide an early diagnosis of debilitating disorders will reduce these enormous health care costs. Adequate funding from NIH for the development of ESA's technology would be a cost-effective investment.

Technology that unlocks the chemical complexity of the brain would have a significant impact on controlling the high cost of health care. We need to make this instrumentation available to biomedical researchers.

Unfortunately, a company with our limited resources will take years to get this instrumentation into the hands of the biomedical community. This is an ideal opportunity for a joint Government-industry effort to accelerate this program.

Thank you.

Senator WEICKER. Mr. Block, thank you very much. I have no questions. Senator Hollings?

Senator HOLLINGS. Mr. Block, you get early diagnosis and then as a result you are able to do what that ordinarily would not occur? I am trying to find out what the treatment is. Is there a treatment?

Mr. BLOCK. We have the technology which, when working with researchers, we hope to get an early diagnosis. If you get an early diagnosis, then it gives you the opportunity to provide a treatment long before you reach any sort of critical stage. If you can measure it early enough, you can track the mechanism of the disease and get to understand it.

Senator HOLLINGS. But can you cure it? I am just trying to understand. You say you have an early diagnosis. What advantage is that over a late diagnosis with respect to treatment?

Mr. BLOCK. The earlier the diagnosis, the better the chance of developing a treatment that will work and that will be less traumatic on the patient.

Senator HOLLINGS. But you are still working on that treatment. We don't have that yet.

Mr. BLOCK. No; medical researchers are the ones that have to do this. We are a private company.

PREPARED STATEMENT

Senator HOLLINGS. I understand. Thank you.

Senator PROXMIRE [presiding]. Your statement will be inserted in the record at this point.

[The statement follows:]

STATEMENT OF ALVIN V. BLOCK

America is aging! Currently, there are about 25 million people age 65 or older (almost 12 percent of the population). Death rates have declined 20% over the past 15 years. And, assuming that there are no dramatic new discoveries and improvements in health care practices, death rates will continue to decline another 20% by 1990. In the year 2000, just 15 years away, it is estimated that there will be 32 million people over the age of 65. The National Institute of Aging recently reported that 1.2 million people over 65 are in nursing homes and other long-term care institutions, at a total cost of approximately $22 billion per year. This is expected to increase to approximately 2 million people by 1990 at a cost of perhaps $40-50 billion. Gentlemen, these are staggering figures and represent a tremendous impact on our national health resources. During these days of budget deficits, the question is who is going to pay the bills?

A large number of nursing homes patients suffer from dementia. Alzheimer's disease, one of the dementias, is a neurological illness that produces mental impairment in as many as 2.5 million American adults. The numbers will increase as the population continues to age. Fifty percent of the offspring of Alzheimer's patients run the risk of also developing this disorder. When one totals the offspring in 2nd and 3rd generations that will eventually develop Alzheimer's disease, we are dealing with a very large population.

Approximately one out of every twenty people over the age of 65 will be afflicted by Alzheimer's disease. Statistically, this means that 5 out of the present 100 members of the Senate may contract Alzheimers. A non-selective, non-discriminatory disorder (it could strike you or members of your family), Alzheimer's ranks as the fourth leading cause of death with up to 120 thousand fatalities per year. A degenerative disorder, it attacks the nerve cells in the cerebral cortex, the outer layer of the brain which is responsible for our most sophisticated mental functions. As the disease progresses, memory loss increases and other changes, such as confusion, irritability, restlessness, and agitation, are likely to appear in personality, mood and behavior. Judgement, concentration, orientation and speech may be affected. In severe cases, the disease may render its victims totally incapable of caring for themselves, mandating that the Alzheimer's patient be confined and in custodial care. The cost of this care can run up to $30,000 a year per person, enough to exhaust one's life savings very quickly. Where will the necessary additional funding come from? And what of the emotional costs -- the disruption of the family unit, the psychological impairment and the endless frustration.

With present state-of-the-art instrumentation, there is no definitive test for Alzheimer's. A long and costly series of biochemical tests and behavioral evaluations are necessary to rule out other possible disorders, such as stroke. The only confirming diagnosis occurs during autopsy, or after the fact.

Just imagine! In less than 20 minutes with a single blood or urine test costing under $100, it might be possible to diagnose Alzheimers. I am talking about 5 years from now, when instrumentation developed and presently being used at ESA has been thoroughly tested and undergone clinical trials.

Last year I appeared before you to report on this new technology which promises to improve our understanding of the brain and how it relates to the rest of the body. The brain has been called the last frontier of medical research and the window to the workings of the body.

Today I appear before you to report that ESA has a working system which allows us to resolve and measure up to 400 components of brain chemicals in a single measurement. These brain chemicals are called neurotransmitters, their precursors and their metabolites. Neurotransmitters are the messengers of the central nervous system. They communicate brain signals to nerves that control the body and receive signals that indicate the state of health of the various parts of the body.

Until this time, research has been based on single measurements of neurotransmitters, which frequently resulted in errors due to the presence of other interfering brain chemicals. Our new instrumentation adds an additional dimension to the measuring system and further separates out the brain chemicals, much as the CAT SCAN provides a third dimension to conventional X-ray techniques in measuring physical characteristics of the human body.

We have a significant breakthrough in measurement technology. For the first time medical science has the capability to map the brain's chemistry at a single point in time by determining a profile of several hundred neurotransmitters. By evaluating this profile, we expect to find a neurochemical marker which will be unique to a specific disorder. Biomedical researchers can then correlate these profiles with specific disease states or disorders.

We expect these profiles to permit the early detection and diagnosis of a variety of disorders - any disorder where there is an interface between the brain and the body. Because of the sensitivity of this technique researchers will be able to monitor the progression of a disease, and perhaps determine the mechanism of its progression.

Once the origin and mechanisms of a disease have been established, it should be possible to develp a specific pharmaceutical for early therapeutic intervention.

Over the past year we have applied our instrumentation to a number of biomedical problem areas. We have been working primarily with internal funds and with some funding from the Phase I SBIR program in Division of Research Resources (NIH) and from NASA and in a series of collaborations with medical researchers in Boston area hospitals.

Under the direction of researchers from McLean Hospital and the Bedford VA Hospital, we analyzed a number of CSF samples from normals and Alzheimer's patients. Because of the revolutionary sensitivity and resolution of the new technology, we were able to find abnormalities in Alzheimer's disease neurotransmitters that were previously unsuspected. Specifically we identified an abnormal form of a neurotransmitter called serotonin that regulates mood and sleep among other phenomena. In a paper in press in the

Archives of Neurology Journal of the AMA, the researchers from the VA and McLean suggest that this abnormallity may provide a route to diagnosis of Alzheimer's and furthermore, that the abnormal compound may be a neurotoxin. Additional research is needed to determine whether this effect is specific for Alzheimer's vs. other degenerative disorders, e.g., Parkinson's, Korsikoff's, etc., and whether it occurs early or late in the onset of the disease.

At one time in their lives, some 20% of the population will suffer from mental disorders. In a recent study reported by the New York Times, "a high number of psychiatric patients at a New York hospital have been seriously misdiagnosed . . . as many as 75%". There is clearly a need to diagnose behavioral disorders more accurately. Present biochemical tests are cumbersome and costly and while generally, applicable, are not absolutely definitive.

We have been working with the Massachusetts Mental Health Centers and the Harvard Medical School to develop a simple urine test for $D_{scoring}$ (or depression scoring) to classify the particular form of depression by profiling a number of neurochemicals in a single scan. Initial results are promising.

Preliminary work supported by Mass. General Hospital (MGH) and ESA has established differences in CSF between normals and individuals suffering from Trigeminal Neuralgia (facial pain) and/or migraine. The intent of this effort is to find a specific neurochemical marker which can be blocked or enhanced by appropriate pharmacology to avoid surgical intervention. The work has indicated significant differences in values for a number of neurotransmitters and is being extended to study peptides and a number of other pain response factors. ESA has submitted a proposal to NIH to extend this work and MGH is submitting a grant request to NIH in a consortium with ESA to further support of this program.

An abnormal neurotransmitter or neurotransmitter profile has been postulated as the causative agent of motion sickness. Work is underway with support from NASA (Ames Research Center) to search for pattern differences in cerebrospinal fluid (CSF) between susceptible and non-susceptible animals and identify abnormalities in CSF during motion sickness. The quality assurance and preliminary analysis phases of the contract have been completed and a specific pattern related to emesis (nausea) has been found. Studies are now being completed to describe susceptible vs. non-susceptible animals. Additional support from NASA (Johnson Space Center, Houston) has been arranged to perform the same type of work on humans.

Work performed on determining the mechanism of space motion sickness has implied similar characteristics in other forms of emesis or nausea. A Phase I study with the Dana Farber Cancer Institute in Boston has been submitted to NIH to evaluate neurotransmitter patterns as they relate to anti-emetic drugs administered during chemotherapy. The study is directed at predicting in advance the optimum type of mixture and level of anti-nausea compound to be administered.

ESA would like to thank the Division of Research Resources, NIH and NASA for their support of our development efforts.

There is a need to fund not only basic research, but also the development of the instrumentation necessary to support that research in order to bring new techniques and procedures to the clinical markets. The national cost of health care is approximately $350 billion per year or one billion dollars per day. The ability to provide early diagnosis of debilitating disorders will help to reduce these enormous health care costs.

In summary then, we have discussed that degenerative diseases are going to cost up to $50 billion/year by 1990. At some time in their lives, twenty percent of the population have mental disorders with a high degree of inaccuracy in diagnosis.

You can see that technology that could unlock the chemical complexity of the brain would provide significant benefits to society and would have significant effect in controlling the high cost of health care. Unfortunately, a company with our limited resources will take years to get this instrumentation into the hands of the biomedical community. This is an ideal opportunity for a joint government-industry effort to accelerate this program.

STATEMENT OF DENHAM HARMAN, M.D., EXECUTIVE DIRECTOR, AMERICAN AGING ASSOCIATION

Senator PROXMIRE. The next witness is Dr. Denham Harman. He is executive director of the American Aging Association.

We are happy to have you here, sir. Go right ahead.

Dr. HARMAN. Mr. Chairman, ladies and gentlemen, my name is Denham Harman. I am executive director of the American Aging Association and Millard professor of medicine and professor of biochemistry at the University of Nebraska College of Medicine in Omaha, NE.

I appreciate the opportunity to speak before this committee on behalf of the American Aging Association in support of biomedical aging research in the National Institute on Aging.

Average life expectancy at birth is a rough measure of our span of healthy productive life. Life expectancy, now 74.8 years, is rising progressively more slowly to a plateau value of 75–76 years.

The aging process has now become the major obstacle to further increases in life expectancy. This basic biological process produces changes which increase susceptibility to disease and death. The contribution of such changes to disease apparently increases progressively with advancing age so that preventive measures become less and less effective and eventually to no avail.

Slowing the aging process should increase our healthy lifespan. The conviction that this is a feasible possibility is growing. In studies based on one theory of aging, it has been easy to increase the average lifespan of mice by 20 percent, equivalent to increasing the lifespan of man from 75 to 90 years, and to decrease the incidence of disease.

The aging process is the universal killer disease. It ensures the death of all individuals. The nature of this process is in dispute. Numerous hypothesis have been advanced to account for aging. Investigation of such hypothesis should ultimately lead to an understanding of the nature of the aging process. Application of that knowledge should almost certainly increase our healthy lifespan, decrease the period of senescence, and ameliorate the economic and social problems associated with age.

Many reasons have been advanced for avoiding serious study of the aging process. For example, it is too nebulous, we need to gather more facts, we are only interested in the quality of life—what else. Not its length. If we could increase lifespan, we probably should not because of the potential social and economic problems that might arise. Such spurious arguments should not be permitted to block research on the aging process. This is a major problem. Is there anyone who does not wish to remain healthy longer?

It was the intent of Congress, as expressed by Congressmen Tim L. Carter and Paul G. Rogers on page 275 of the House Congressional Record for May 6, 1974 that the emphasis of the NIA should be on biomedical aging research and in particular to determine the cause of aging. Biomedical aging research is the only part of the umbrella mandate of NIA that is unique to the Institute, and by far the most important.

The American Aging Association urges the NIA to initiate a major biomedical aging research program focused on determining the biological basis of aging and to apply that knowledge to increasing our span of healthy life. The Salk vaccine became available 30 years ago and stilled the clamor for more and better iron lungs. Likewise, slowing of the aging process will surely decrease the demand on society for more services and better nursing homes for the aged.

In summary, life expectancy at birth, a rough measure of the span of healthy life, is now almost at a plateau value because of the aging process. Slowing this process should increase our healthy lifespan and diminish the problems associated with the aged. We urge the NIA to initiate a major biomedical aging research program directed to this end and that Congress ensure the necessary funds.

Thank you.

Senator PROXMIRE. Thank you very much, doctor. I think you have presented excellent testimony. I certainly share your sentiments, as I am only a few months away from being 70 years old, and I hope I can look forward to an increasing and healthy lifespan. That is exactly what you are aiming at.

Dr. HARMAN. I can't overemphasize this is a major health thing and we can do something about it if we can go ahead and do it.

Senator PROXMIRE. I think you made a very convincing argument.

Senator INOUYE. I can't get over you are going to be 70. [Laughter.] He doesn't look a day over 60.

Senator PROXMIRE. Bless your heart. That makes my day and my month.

Thank you very much.

PREPARED STATEMENT AND QUESTIONS

Senator Specter has some questions for you for the record, if you would be able to answer them. We will make them available to you so that you can answer tham when you correct your remarks.

Dr. HARMAN. Yes, Senator.

[The information follows:]

STATEMENT OF DR. DENHAM HARMAN

My name is Denham Harman, M.D., Ph.D. I am Executive Director of the American Aging Association (AGE), Millard Professor of Medicine and Professor of Biochemistry at the University of Nebraska College of Medicine in Omaha, Nebraska.

I appreciate the opportunity on behalf of the American Aging Association to amplify my oral testimony before the Labor-HHS-Education Appropriations Subcommittee of the United States Senate on the pressing need to support biomedical aging research.

The American Aging Association (AGE) was formed in 1970. AGE provides a forum for the many basic scientists, medical clinicians, and interested lay people (with heterogeneous backgrounds and areas of expertise) to present their findings in biomedical aging research, to be brought up to date on the work of other scientists, to attempt to reach common ground in areas of scientific dispute, to educate the medical community which serves our growing elderly population, and also to reach out to the general public whose members often have concerns about aging research, likelihood of increasing longevity, alleviating the disabilities related to both the effects of aging on a particular part of the body, or diseases that afflict the elderly.

Highlights of the American Aging Association's annual scientific meeting are the research symposium (which is published by Raven Press as a volume in their ongoing Aging Series), and the Clinical Gerontology Lectures which serve to transfer authoritative practical information related to Geriatrics and Aging Research to the practicing physician. A copy of the program for the 1984 annual meeting is attached.

Aging is a basic biologic process that goes on continuously in every individual from conception until death. Aging is a prime example of built-in obsolescence, ensuring individual death to permit species survival. Interest in this process has been growing with the increasing awareness that life expectancy at birth is approaching a plateau in the developed countries; it is now 74.8 years in the United States and will rise to a plateau value of 75-76 years. As a result of the increasing life expectancy the proportion of people age 65 years and above in the United States has grown from 4% in 1900 to almost 12% in 1983. It is estimated that by 2030, 18.3% of our population will be over 65 years of age. Although the elderly currently comprise about 12% of the population, they account for 29% of health care costs.

The aging process is now the major factor nullifying efforts to increase the healthy life span. Although we die of a specific cause, such as heart disease, cancer or diabetes, it is the rate of the aging process which largely determines _when_ the stage is set for the event that quickly or slowly terminates our life. The effect of the aging process on the rate of development of disease can be illustrated by comparing dogs and man. Both species die of the same spectrum of disease processes - heart disease, cancer, etc. - but all dogs are dead by about 20 years, and all men and women are dead by about 100 years.

By slowing the aging process we will put off to a greater age the heart attacks, cancer, complications of diabetes, or the other events that will kill us. Through slower aging, a man or woman in the future at age 60 may have the health and vitality of the average 45-50 year old of today.

The conviction that slower aging is a feasible possibility has been growing steadily over the past two decades, due to the gradual accumulation of knowledge of the effects of age on biological systems, and of reasonable hypotheses to account for such changes. Besides shifting the _average_ life expectancy to higher levels, inhibition of the aging process may also increase the natural human _maximum_ life span to some extent. Equally important is the possibility of increasing the quality of life in old age by permitting these individuals to be healthier, vigorous and more productive.

It is a reasonable possibility that pursuit of the scientific leads we already have regarding the nature of the aging process, not to mention new ones that are likely to be found, will result in significant increases in the period of healthy productive life.

We spend several billions of dollars each year on research on cardiovascular disease and cancer, as well as for treatment of these and other diseases. In the past, prior to the establishment of the National Institute on Aging, there was almost negligible funding for aging research. Yet, aging per se is the process that has almost nullified all attempts to substantially increase our healthy life span for the past three decades. Even the current National Institute on Aging budget of around $140,000,000 is small when compared to our national yearly expenditure on major diseases. This is especially true since the National Institute on Aging funding figure also includes substantial support for non-biomedical programs.

This disparity in research funding is even more striking in light of the fact that "conquest" of cancer would increase the average life span by only about 2 years, while the corresponding figure for the elimination of cardiovascuar diseases as causes of death is probably less than 5 years. We clearly need to increase the level of biomedical aging research, in order to find practical means of slowing the aging process.

It should be recognized that many of the problems of the aged and the goal of finding practical means of slowing the aging process are entirely different. The medical problems that affect the aged - largely degenerative afflictions such as cardiovascular diseases, cancer, neurological disorders, and arthritis - continue to be under active study in the older well-established disease oriented units of the National Institutes of Health. Although the sociological, psychological and economic problems of elderly citizens are an important concern of society, the American Aging Association feels a responsibility to urge Congress to support greater levels of funding for biomedical aging research.

It was the interest of Congress as expressed by Congressmen Tim L. Carter and Paul G. Rogers on page 275 of the House Congressional Record for May 6, 1974, that the National Institute on Aging should give emphasis to biomedical aging research, and in particular, to determine the cause of aging. Biomedical aging research is the only part of the umbrella mandate of NIA that is unique to the Institute, and by far the most important. The major intent of Congress has been largely ignored. Virtually no work is being done to slow the aging process because the vast majority of gerontologists are concerned with the "awesome social consequences of major breakthroughs in aging", as expressed by Robert Butler in his 1974 book "Why Survive? Being Old in America", and more recently, by Leonard Hayflick in the January 1982 issue of Executive Health, "At first thought it may seem to be a desirable goal (to slow the rate of aging). I believe it might be an unmitigated disaster". Today essentially all biological, behavioral and social research studies on the aging process are descriptive in nature or related to support programs for older persons.

The concerns of the gerontologists are unwarrented. Life expectancy has increased 25 years since 1900 without producing any social upheavals. Future increases that may be achieved through slower aging are apt to be relatively small - 5 to 15 years, and long in coming - and will probably result in only a few more people living beyond 100 years, the "natural" maximum life span of man. Time, healthy useful time, is our most valued possession and makes all things possible. The benefits of having more such time to work, to contribute to society, and to do the other things we wish, vastly outweigh any conceivable problems that might arise from slowing the biological process of aging. The NIA should actively follow up on all research leads that show promise of slowing the aging process and try to reduce them to practice.

In summary, we urge expanded appropriations for the National Institute on Aging. With greater efforts in biomedical aging research that should come about from such funding, there will be a much better chance of having practical means of slowing the aging process available in the near future. The fruit of such research will increase the prospects for more years of healthy active useful life for our citizens while decreasing the demands on society for the care of the aged.

Point of View

THE AGEING PROCESS IS A KEY PROBLEM IN BIOMEDICAL RESEARCH

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THE likelihood of attack by intrinsic diseases greatly increases as we grow old. Ageing is associated with a cluster of pathologies, and one of its remarkable features is the extent of synchrony in the onset of these deleterious changes in diverse tissues and organs. Ageing alters the structure of connective tissue and reduces the resilience and elasticity of arteries and veins, which in turn results in cardiovascular and cerebrovascular disease. It is associated with defects in hormone levels, leading, for example, to diabetes. It affects sensory perception, particularly hearing and sight. It reduces memory and intellectual capacity, sometimes to the extent of senile dementia. The efficient functioning of the kidneys and other internal organs is progressively impaired. Bones become brittle and are much more easily broken than in younger adults. Autoimmune diseases become increasingly common, and there is a steep rise in the incidence of several types of carcinoma. Outwardly the more familiar features of ageing include wrinkling of the skin; loss of hair pigment and hair follicles; changes in posture; and muscle wastage, which makes active coordinated movement increasingly difficult.

A vast body of medical literature is concerned with the study of those diseases which are closely associated with ageing. Yet this research is not labelled gerontology—that is, the scientific investigation of the ageing process. Thus, many workers in these areas of biomedical research are studying ageing without even being aware of it! The point is not an academic one; as I will explain, it raises questions which are fundamental for the strategy of medical research.

A SINGLE ORIGIN FOR AGE-RELATED DISEASES?

The diverse effects of ageing on the human body are generally thought to imply multiple causes. How could one type of change or defect at the molecular or cellular level produce effects as diverse as cataracts in the lens, the cross-linking of collagen in connective tissue, the depletion of insulin, and the accumulation of the "age pigment" lipofuscin in brain neurons? It is implicit in the organisation of medical research that there are indeed multiple causes of ageing. Research on cardiovascular disease is directed not only towards successful treatment but also towards an understanding of the cause of the disease. The same is true of research in cancer, kidney failure, hormone imbalance, defects in immune response, Alzheimer's disease and senile dementia, loss of hearing and sight, and so on. In each case the research is concerned not only with treatment of the disease but also with its origin. The fundamental strategy adopted by many research foundations and others responsible for the direction of medical research is that each disease should be studied separately.

Suppose, however, that the degenerative changes associated with ageing do not have multiple causes but only one or a small number? We know that ageing is genetically determined because mammalian species age at very different rates: the same types of age-related changes occur thirty times faster in a mouse or rat than a man. We also know that quite simple inherited abnormalities in man have drastic effects on the ageing process. In Down's syndrome, which is caused by the presence of one small extra chromosome, a wide range of age-related pathologies appear prematurely.[1] Werner's syndrome, which is due to a single autosomal recessive mutation, brings forward many of the symptoms of normal ageing by about thirty years.[2] Are the changes seen in these patients the same as those in normal people, or is Werner's syndrome instead a caricature of normal ageing?[1-3] Whatever the answer, the mutation is pleiotropic, in that it has multiple phenotypic effects. These include whitening of the hair, bilateral cataracts, loss of subcutaneous tissue and muscle, and progressive changes in skin, all of which give the individual a prematurely aged appearance. Arteriosclerosis becomes manifest and is the commonest cause of death, at an average age of about 46 years. Diabetes is common, and the incidence of neoplasms is unusually high. Cells from patients with Werner's syndrome also age more quickly in vitro.[3-5] Other inherited diseases, such as progeria and Cockayne's syndrome, have even more precocious ageing effects.[1]

MISDIRECTED RESEARCH

The fact that single genetic defects can have multiple effects on ageing argues strongly against the multiple-cause hypothesis and in favour of a basic cause which underlies many, perhaps all, the pathologies of old age. Theories for such a cause have often been discussed. If such a cause exists, then the far-reaching conclusion can be drawn that much of our medical research today may be based on completely false assumptions. Instead of attacking the problem of the onset of each individual age-related disease, we should be concentrating much more research on those primary molecular and cellular changes that will eventually give rise to tissue and organ degeneration.

It will be pointed out that the relationship of a disease, such as cancer, to chronological age, may be more apparent than real. The incidence of carcinomas rises roughly as the sixth power of age, which is usually interpreted to mean that several sequential events must occur before a tumour is formed.[6] Nevertheless, the frequency of these events is itself age-related, if we consider the similar likelihood of tumours arising in short-lived and long-lived animals, as well as the very different probabilities of cells from these species being transformed to malignancy in culture.[7] In any case, a more direct relationship between ageing and carcinogenesis cannot be ruled out.[8]

Research on the pathological features and treatment of age-related diseases does not need justification, but in my view it is often fruitless to study the origin of these diseases without attempting to understand the underlying mechanism of ageing itself. It would not be sufficient merely to increase support for research in gerontology, since most work published in this field is itself concerned with description of pathological changes in tissues and organs, usually in experimental animals. What is needed is a concentration of effort on the study of the molecular and cellular causes of ageing. This type of research should therefore have a central position in the strategies for biomedical research and receive far more support than it does at the present time. The ultimate aim of such research would not be to stretch out the lifespan by retarding the ageing process, but specifically to prevent the onset of innumerable debilitating diseases of old age.

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QUESTIONS SUBMITTED BY SENATOR ARLEN SPECTER

Question. Dr. Harman, please discuss your views on the correlation between funding for Medicare and the quality of health care for America's aged.

Answer. I have discused this question with a number of my friends. We are all in essential agreement. Funding for Medicare has probably improved access to healthy care to some extent, but on the overall, has had no significant affect on the quality of healthy care for America's aged.

Question. The graying of America is a well-documented phenomenon. How significantly will the proposed reductions in funding for gerontological research inhibit the research community's capacity to assess the ramifications of this trend? What specific areas of this research do you think would be most adversely affected?

Answer. I very much doubt if a reduction in funds for social gerontology research will have any significant effect on their ability assess the ramifications of the graying of America.

STATEMENT OF JAMES A. BRUNER, VICE PRESIDENT, ALZHEIMERS DISEASE AND RELATED DISORDERS ASSOCIATION

Senator PROXMIRE. Our next witness is James A. Bruner, vice president of the Alzheimer's Disease and Related Disorders Association.

Mr. Bruner, we are happy to see you. Incidentally, there was an article, which may have been called to the attention of other witnesses this morning, on the first page of the science section of the New York Times, title "Alzheimers Disease Families Bitter—Despite Research Advances, They See Little Immediate Gain".

Mr. BRUNER. Mr. Chairman, members of the committee, ladies and gentlemen, I have administered to the needs of my wife, June, an Alzheimer victim, for the past 12 years. During these torturous years I have witnessed the relentless devastation of a disease that destroys first the brain amd then the body. It has been described as a double funeral.

I watched day by day, week by week, month by month, year by year as this silent thief robbed her of the ability to function and perform even the simplest tasks. In the end she was incontinent, unable to feed herself and reduced to an infantile state of total dependence on me, her care-giver.

I am a 30-year military veteran and Alzheimers disease put an end to all our dreams of sharing and enjoying together our twilight years. A few months ago, on the advice of my personal physician, I placed my wife in a nursing home to preserve what remained of her health and, yes, what remained of my own mental and physical resources. These had been strained to the breaking point.

I would strongly recommend that any of the members of this committee not familiar with Alzheimers disease find the time to visit a nursing home for victims of this calamity and study first-hand the ravages and destruction of this terrible affliction. Such a visit would be painful but edifying. For myself, each visit to my wife at the nursing home means dying a little. It is as though I am attending a funeral that began 12 long years ago.

The national deficit is a subject of prime concern these days. But for those of us who wait and tend to the needs of a suffering Alzheimer family member, deficit or not, we cannot wait. We need vastly increased Federal funds for research, care and respite centers. We need tax credit relief, and as yet there is none. We need insurance and there is none. Medicare is missing for the suffering Alzheimer family member care-giver. Medicaid is available for those 65 or older only after they have reduced their total assets to the poverty level of $2,500.

And we are witness today to 4 to 5 million Alzheimer victims in America. The number is growing. The population is aging and, therefore, these numbers will increase. Let me add, we are seeing an increase, too, in victims in their forties and fifties. In short, we are witnessing an epidemic listed as the fourth leading killer of our people. It must be brought under control as quickly as possible.

I am not qualified to speculate on the probable causes of Alzheimers disease. We are all aware of research into the chemistry of the brain and a variety of theses and theories relating to environmental, viral, and genetic factors, but the answer still escapes us. We must redouble our efforts and commit a larger portion of our national and community resources to this task. The present $37 million committed by the Federal Government is a very modest beginning.

Thank you for this opportunity to meet and share with you these thoughts on a hidden enemy who is cutting a terrible path of destruction and misery in our midst. We should remind ourselves that any of us or any of our family members could be the next victim. It is a sobering thought.

I man a hotline for the Northern Virginia Alzheimer chapter. I am also a vice president of that chapter. The tales of despair and suffering I hear during the course of a 24-hour day would melt the heart of a stone statue. While I offer counsel and guidance for contact with support groups and community services, this is precious little in relation to the calamity.

Isn't it time all of us, as a community and as a nation, took the long-overdue strong actions needed to help these long-suffering Americans cope with Alzheimers disease, through improved research, tax benefits and insurance provisions? Given my own experience, I can only add to this my own prayer of hope and a thankful amen when we have finally found both cause and cure and an end to this ghastly thief in the night who steals from us our most precious treasure, our loved ones.

Thank you.

Senator PROXMIRE. Thank you, Mr. Bruner, for an extraordinarily moving and eloquent statement. I know it is agony for you to even talk about this, yet you lived through it for 12 years with your wife suffering as she has. I think we can understand this kind of vivid personal story far better than statistics or any other kind of information. You have made a valuable contribution.

Senator Inouye?

Senator INOUYE. I don't think any questions of mine could add to the immensity of this problem.

Mr. BRUNER. Thank you, sir.

Senator PROXMIRE. Is it Mr. Bruner or Doctor Bruner?

Mr. BRUNER. No, sir, it is mister.

Senator PROXMIRE. You are vice president of an Alzheimer disease chapter?

Mr. BRUNER. Of the Northern Virginia Alzheimer chapter.

Senator PROXMIRE. We have a question for you from Senator Specter. You can answer that for the record.

Mr. BRUNER. Thank you very much.

[CLERK'S NOTE.—No response received to date.]

STATEMENT OF JOHN F. SANTOS, PH.D., MEMBER ACTION COMMITTEE, PROFESSOR OF PSYCHOLOGY AND DIRECTOR OF THE CENTER FOR GERONTOLOGICAL EDUCATION, RESEARCH AND SERVICE, UNIVERSITY OF NOTRE DAME

Senator PROXMIRE. Our next witness is Dr. John Santos, member of the Action Committee, professor of psychology and director of the Center for Gerontological Education, Research and Service, University of Notre Dame.

Are you any relation to, or are you, the former third-base man for the Chicago Cubs?

Dr. SANTOS. No; that is Ron Santo. That is another group.

Senator PROXMIRE. He has testified on juvenile diabetes. He is a marvelous player and a fine human being. It seems to go with the name.

Go right ahead.

Dr. SANTOS. Thank you. We submitted a full statement and I just want to hit a couple of high points.

I might say it is both impressive and also humbling to sit here and listen to the various stories and to know you are not the only one that has problems. It is really impressive.

As I point out, I am Dr. John Santos, professor of psychology and director of the Center for Gerontological Education, Research and Service, University of Notre Dame.

On behalf of the Action Committee to Implement the Mental Health Recommendations of the 1981 White House Conference on Aging and the American Psychological Association, I am pleased to have this opportunity to present testimony in support of the National Institute on Aging.

Mr. Chairman, the Action Committee and the American Psychological Association urge this committee to support the NIA budget at the fiscal year 1985 level of $144.5 million plus an allowance for normal growth and to reject the budget reduction proposed by the administration. We believe that the research being conducted through NIA is too important to be sidetracked by the administration.

We oppose any attempt by the administration to interfere with NIA's research efforts, whether by budget reductions or by forward funding or any other means. We urge further that this committee, with every method at its disposal, prevent forward funding to be used as a means to circumvent the will of Congress.

The Action Committee and the American Psychological Association fully support the vital role that NIA is performing in funding research on an important segment of our national population.

Over the past several years, NIA supported research has dramatically increased our knowledge of illnesses and and diseases common to the elderly, the psychological and mental health processes of aging. We have learned, for example, that so-called senility and intellectual decline are not national concomitants of growing older and that creativity and vitality can be a part of a person throughout life.

I might point out Bob Butler at NIA was very responsible for changing this notion of senility being synonymous with aging.

My own profession of psychology is actively involved in NIA-funded research in the psychological and social aspects of aging. Some examples of this work are research conducted on the cognitive and intellectual functions in aging. It is known these functions may show relatively little decrease with advancing age. I think many times we come to this notion that everything has to be on the downtrend with age because there are a lot of sick people who are contributing to what they call that terminal drop. We don't know about it, but those people show up rather poor. There are a lot of people in great shape, but we don't often look at them. We look at the bad side.

Psychologists are also involved in the aggressive efforts that NIA is making in connection with Alzheimers disease. This includes research into causes, treatment, and prevention; research to improve diagnostic capabilities; research on the sensory and cognitive changes in Alzheimers patients; and research on the clinical processes and course of the disease.

The future health and life satisfaction of America's older population is being shaped in many ways by the research that is supported by NIA today. In the testimony before this committee in March, Dr. T. Franklin Williams, Director of NIA, discussed the ongoing NIA-funded studies that are increasing our knowledge of the aging process.

Future vital contributions of NIA, however, are being threatened. At a time when NIA is making progress in many important areas of aging, and I might say we have a long way to go and we are coming from way, way back, the administration has proposed to reduce its support by the mechanism of forward funding and the reduction of the budget from $144.5 million to $134.7 million. In our estimation, this is shortsighted. It is penny-rich but dollar-poor. It is a misdirection of dollar priorities to cut research in aging at a time when we anticipate a doubling of the aged population in the next 40 years and, therefore, an increased demand for health care and social services. The idea is as you get into the older old population, as to numbers, the probability of multiple physical and mental health problems go up. The old old, that is the group in which we have most of the problems.

The administration's budget reduction plans and forward funding strategy will be detrimental to aging research in a number of ways. First of all, by reducing the overall number of projects that can be conducted over the next several years and by reducing the number of researchers that will be encouraged to work in the field. This is extremely serious because we have never really—I was on the NIH committee and am now on the NIA committee. We never really developed a cadre of researchers. We were just moving in that direction when the bottom fell out on the training fund. So we have to encourage people to go into this area. This is not an area they have been encouraged to go into in the past.

Also, by reducing NIA's ability to develop research leadership, that is extremely important. The recently established programs which are going to be immediately hurt at the NIA would be something we have just been talking about here, the Alzheimer Research Centers. This is a new initiative. It is slated to be reduced from five to three new centers for fiscal year 1985.

Research on the over 65 population, we know very little in the way of such things as suicide and alcoholism and so forth and so on. The breaking down of those figures above age 65 is very difficult because they don't come broken out that way.

Both of these are recent priority initiatives at NIA.

The Action Committee and the American Psychological Association thank this committee for their continued interest and support of the National Institute on Aging and allowing me to testify.

Senator PROXMIRE. Thank you very much, Dr. Santos. Your testimony is very logical and you make as powerful a case as I have heard on this subject. We are in your debt.

Senator Inouye?

Senator INOUYE. As I listened to the testimony this morning, I can't help but reflect upon last year's statistics. Last year we spent 50 cents per person in the United States for prevention and $1,440 per person for curing.

Dr. SANTOS. Yes.

Senator INOUYE. If we spent 50 cents more for research, I think we could cut the curing in half.

Dr. SANTOS. There is no doubt about that. One of the impressive things about doing research in the area of aging is it is questionable whether we will go on or when or how often we will go to the Moon. But one thing is for sure: Everybody here is going to get old. This is not a contribution that is limited, but it is something that is international. It is a contribution to humanity. It is something everybody has to experience. There is no getting around it. The problems aren't going to go away because the budget goes down. They will get bigger, as a matter of fact.

Senator INOUYE. Thank you.

PREPARED STATEMENT

Senator PROXMIRE. Thank you very much, doctor. We will place your statement in the record.

[The statement follows:]

STATEMENT OF DR. JOHN F. SANTOS

I am Dr. John Santos, professor of psychology and director of the Center for Gerontological Education, Research and Service, University of Notre Dame, South Bend, Indiana.

On behalf of the Action Committee to Implement the Mental Health Recommendations of the 1981 White House Conference on Aging and the American Psychological Association, I am pleased to have this opportunity to present testimony in support of the National Institute on Aging.

The Action Committee, of which I am a member, was established in 1982, by a grant from the Retirement Research Foundation, as an interdisciplinary body concerned with the financing, organization and delivery of mental health services to older Americans, and with support for research in the health and mental health issues of the elderly. The Action Committee is chaired by former HEW Secretary Arthur S. Flemming.

The American Psychological Association, representing over 76,000 members, is the primary national organization representing psychology. The Association is active in promoting responsive concerns by the profession on a variety of public policy and social issues; advocating adequate funding for important behavioral research; disseminating psychological knowledge to enhance and increase human progress and well-being; and developing standards of ethical conduct and professional practice for psychologists.

Mr. Chairman, the Action Committee and the American Psychological Association urge the Committee to support the NIA budget at the FY 1985 level of $144.5 million, and to reject the budget reduction proposed by the Administration. We believe that the research being conducted through NIA is too important to be sidetracked by the Administration. We oppose any attempt by the Administration to interfere with NIA's research efforts, whether by budget reductions or by "forward-funding" schemes or other mechanisms. We urge, further, that the Committee, with every method at its disposal, prevent "forward-funding" to be used as a means to circumvent the will of Congress.

The Action Committee and the American Psychological Association fully support the vital role that NIA is performing in funding research on an important segment of our national population. As the proportion of people in the United States age 65 and over continues to grow, from approximately 12 percent of the population currently (over 25 million individuals), to a projected 21.1 percent in 2030 (nearly 65 million individuals), the support for NIA's funding for research in aging becomes increasingly important.

The changes in demographics and the increasing longevity of our older population have implications for our nation's health care system, employment practices regarding older persons, and many of our assumptions about aging. The traditional view held that old age was a continuous decline in health, intellectual functioning, interests, social activity, and vitality is being dispelled. Over the past several years, research has dramatically increased our knowledge of illnesses and diseases common to the elderly, the psychological and mental health processes of aging. This was done largely through research funded through NIA. We have learned, for example, that prevention activities which change behavior can reduce or eliminate osteoporosis, a condition of bone softening common to women over age 65, that senility and intellectual decline are not natural concomitants of growing older, and that creativity and vitality can be part of a person throughout life.

My own profession of psychology is actively involved in NIA funded research in the psychological and social aspects of aging. Let me provide some examples:

- Research conducted on the cognitive and intellectual functions in aging, focusing on memory, perception and psychomotor skills, has revealed that cognitive function, intellectual capability and reaction times of the aged may show little decrease with advancing years. These findings have implications for employment, job training, and effective functioning of the aged in everyday life.

- Behavioral geriatrics research concerns health-related attitudes and behaviors of the aged and health care providers. Behavioral research in this area has focused on such issues as the older individual's compliance with prescribed regimens and treatment plans, and the use of behavioral therapies and biofeedback techniques in preventing or reducing medical problems. For example, the Surgeon General's office has estimated that incontinence in the elderly may cost this nation billions of dollars annually, as it is a major reason that the elderly are placed in nursing homes rather than cared for at home. Yet, biofeedback, the conscious control of usually involuntary behavior, as a result of NIA-supported research, has been shown to allow the older person enough control to live at home.

- Another major reason for nursing home admission is broken hips. Here, too, the Surgeon General has said that behavioral research can play a major role. You see it is not that an older person falls down and breaks a hip. Instead it is that the older person breaks a hip and then falls down. The break comes after getting out of a chair incorrectly or a step that causes a severe weight imbalance. Preventing broken hips means changing behavior and NIA supported research in psychology is needed for that.

- Bereavement research concerns the impact of bereavement and other age-related problems on the health and mortality of the aged. Bereavement has been associated with increased rates of alcoholism, accidents, infectious diseases, and suicide. Research has focused on the implications of interventions designed to lower the health and social risks associated with bereavement.

Psychologists are also part of the aggressive effort NIA is making on Alzheimer's disease. This includes such areas as psychophysiological research into the causes, treatment and prevention; research to improve diagnostic capabilities; research on the sensory and cognitive changes in Alzheimer's patients; and research on the clinical processes and course of the disease.

The future of America's older population is being shaped by the research NIA is supporting today. In his testimony before this Committee in March, Dr. T. Franklin Williams, Director of NIA, discussed the ongoing NIA funded research that is increasing our knowledge of the aging processes. The vital contributions of NIA, however, are being threatened. At a time when NIA is making progress in many important areas of aging, the Administration has proposed to reduce its funding through the mechanism of "forward funding" and by the reduction of the NIA budget from $144.5 million to $134.7 million. It is a short-sighted, "penny rich but dollar poor," misdirection of budget priorities to cut research in aging at a time when we anticipate a doubling of the aged population over the next 40 years and an increased demand for health care and social services.

The Administration's budget reduction plans and "forward-funding" notions are going to be detrimental to research in aging by reducing the overall number of research projects conducted over the next several years and in reducing the number of researchers encouraged to conduct work in aging. The programs which are going to be immediately hurt at NIA are the Alzheimer's disease research centers, slated to be reduced from five new centers to three for FY 1985, and reduction in research on the over age 85 population. Both of these areas are priority research areas for NIA. In addition, budget reductions have caused a ceiling to be placed on the hiring of new staff to conduct intramural research, such as in the physiology of aging.

The Action Committee and the American Psychological Association thank the Committee for their continued interest in and support of the National Institute on Aging, and for allowing me this opportunity to present our views. Thank you.

Senator PROXMIRE. We have a rollcall vote now on the Senate floor. We can either recess the hearing for a few minutes or we can take turns going over to vote and coming back.

[Discussion off the record.]

STATEMENT OF DAVID SATCHER, M.D., PH.D., PAST PRESIDENT, ASSOCIATION OF MINORITY HEALTH PROFESSIONS SCHOOLS

Senator INOUYE [presiding]. Our next witness is Dr. David Satcher, past president of the Association of Minority Health Professions Schools.

Welcome, sir.

Dr. SATCHER. Thank you, Senator Inouye.

I am pleased to appear before you today to discuss the concerns of the Association of Minority Health Professions Schools as they relate to the National Institute on Aging and aging research.

I would like to say at the outset that I represent an association which includes the Meharry Medical and Dental Colleges, three schools of pharmacy, including Texas Southern University, and one School of Veterinary Medicine, Tuskegee Institute. Together these institutes have educated more than 40 percent of all the black positions in dentistry in the country today, more than 75 percent of the pharmacists who are black, and more than 90 percent of the veterinarians.

In June 1983, the association published a report entitled "Blacks in the Health Professions, a National Crisis and a Time for Action." This report documented the significant gap in the health status of the blacks compared to whites in this country and a persistent shortage of blacks in the health professions.

As you know, the reality of the Nation growing older has recently become an issue. By the year 1990, and especially in the year 2000, the number of Americans age 65 and older will have increased significantly and is expected to reach 36 million, one-third more than today. In addition, and perhaps more significantly, by the year 2000, there will be 5.5 million Americans over age 85, 3.5 million up from today.

These are conservative estimates. This is good news in that it represents significant progress in the health and health care of Americans.

However, in order to effectively deal with the needs of this aging population, we must plan appropriately. This type of planning, which must include a renewed focus on identifiable diseases in the elderly, such as Alzheimers disease, will require resources. The appropriate allocation and expenditure will in time save the Nation's resources.

The Association of Minority Health Professions Schools also believes the President's budget recommendations for the National Institute on Aging are inadequate and inconsistent with the future health and health care of elderly in this country. A rapidly expanding population of aging individuals, coupled with the exciting research advances in the field, indicate a need for rapid commitment of resources, not a decrease in funding. There will be no freeze on the number of older Americans between now and the year 2000 and there must be no freeze in our commitment to prepare for their health and health care.

As you are aware, there is a significant difference in life expectancy between blacks and whites in this country. Similarly, those blacks who do live longer lives and are considered elderly suffer a disproportionately high incidence of hypertensive disease, diabetes, specific types of cancers, obesity in women, glaucoma, and other diseases.

The institutes of our association are committed to training health professionals to address these health care problems, enabling blacks to have a longer life expectancy and to increase their life quality.

The Association of Minority Health Professions Schools believes there are opportunities that now exist for collaborative efforts with other institutions that are currently studying the health of the aging population. For example, Meharry, which recently developed gerontology and geriatric programs, is capable of working with other Southeastern universities, such as Duke University, in conducting studies related to the elderly. We are planning to do so.

I am certain there are ways Meharry could provide valuable input to their research efforts.

Additionally, we believe the institutions of our association are capable of working collaboratively to address aging training and research initiatives associated with blacks and other minorities. We are uniquely qualified since our treatment facilities serve a predominantly black population, many of which are elderly. This environment is highly desirable for training and research.

Mr. Inouye, we are aware of the current fiscal dilemma facing the Nation. We are also cognizant there needs to be a concerted effort to address the growing number of aged individuals in this country. Through research grant and training funds, the institutions of the Association of Minority Health Professions Schools are capable of assisting the NIA in critical aging research issues as well as training professionals in the area of gerontological health care and geriatrics.

Thank you for the opportunity to present the views of the Association, and I will be happy to respond to any questions.

Senator INOUYE. I thank you very much, doctor. You have indicated in your testimony that there is a significant difference between the life expectancy of blacks and whites and also a disproportionately high difference in glaucoma and et cetera. Do you have specific numbers to provide this committee?

Dr. SATCHER. For example, the lowest life expectancy in this country is the average lifespan for black males, which is still less than 65 years, 64.7 to be specific. In some States in this country, for example in Georgia, the life expectancy is less than it is in the country of Kenya.

As you know, now the average life expectancy in this country is approximately 74.5 to 75 years, represented by 78-plus years for white females, approximately 73.5 for black females, and 72 for white males. But the lowest life expectancy is for black males.

Senator INOUYE. It is 73 for black females. What is the reason for the difference between black females and males?

Dr. SATCHER. I think throughout the world there is a significant difference in life expectancy between males and females, it averages about 8 years, based on sex alone. That is a phenomena that has been observed throughout the world, and I don't think we know all the reasons for it.

Senator INOUYE. Do you have any other numbers on cancer, diabetes, hypertensive disease, glaucoma, and others?

Dr. SATCHER. One of the most interesting statistics is obviously the incidence of cancer in this country has been decreasing over the last 10 or 15 years' However, the incidence of all types of cancer during that period of time has increased by 8 percent in the black population. That is especially true for cancers such as lung cancer, cancer of the prostrate, cancer of the esophagus. Those especially have shown a significant increase.

Our concern is better understanding this problem, getting more people involved in research related to the health status of blacks. Last year we were able to get, with the help of Congress, a set-aside of NIH funds to strengthen the infrastructure of institutions that are members of the association. I think this will help significantly.

Dr. Williams, who is head of the Institute of Aging, spent 2 days at Meharry last year working with our faculty looking at ways in which research efforts of our institution could be better collaborated with our association and be strengthened. I think we are in a position to really move forward. I think it is critical the budget for the Institute of Aging be maintained and have the normal growth expectancy as opposed to reducing it or having it frozen.

Senator INOUYE. Thank you very much, Dr. Satcher. You have been most helpful.

Dr. SATCHER. Thank you.

PREPARED STATEMENT

Senator INOUYE. We will insert your statement in the record and then we will take a short recess.

[A brief recess was taken.]

[The statement follows:]

STATEMENT OF DR. DAVID SATCHER

I am pleased to appear before you today to discuss the concerns of the Association of Minority Health Professions Schools as they relate to the National Institute on Aging, and other aging issues.

The reality of the Nation growing old has certainly now become an issue. By the year 2000, the number of Americans aged 65 and over is expected to reach 36 million, a third more older persons than there are right now. By the year 2000 there will be 5 1/2 million Americans over age 85 - up 3 1/2 million from right now. These are conservative figures, Mr. Chairman. The additional effort necessary to effectively deal with the aging population is, and will be monumental. Similarly, with a renewed focus on the identifiable disease of the elderly, such as Alzheimers, a commitment of resources will be necessary.

The Association of Minority Health Professions Schools believes the President's budget recommendation for the National Institute on Aging is totally inadequate. A rapidly expanding population of aged individuals, coupled with the promise of exciting research advances in the field, indicates a further commitment of resources, and acceleration of funding and effort -- not a weak decrease to stay in line with the President's freeze proposal. Mr. Chairman, nobody is putting a freeze on the number of older Americans there will be within the next 20 years.

As you are aware Mr. Chairman, there is a significant difference in life expectancy between blacks and whites. Similarly, those blacks who do live longer lives and are considered elderly, suffer a disproportiontely high incidence of hypertensive diseases, diabetes, specific types of cancer, obesity among women, glaucoma, and other diseases. The Institutions of our Association are committed to training health professionals to address these health care problems enabling blacks expected life span to increase while allowing them to suffer from less disease.

The Association of Minority Health Professions Schools believes there are opportunities that exist now for collaborative efforts with other institutions that are currently studying the health of the aging population. For example, Meharry's Gerontology Program is capable of working with other Southeastern institutions, such as Duke University which is conducting a study on the health of aged minorities. I am certain there are ways Meharry could provide valuable input to their research efforts. Additionally, I believe the Institutions of our Association are capable of working collaboratively to address aging training and research initiatives associated with blacks and other minorities. We are uniquely qualified since our treatment and hospital facilties serve a predominately black population, many which are elderly. This environment is highly desirable for research efforts, as well as for the training of minority research and clinical specialists.

Mr. Chairman, we are aware of the current fiscal dilemma the nation is facing. But we are also cognizant that there needs to be a concerted effort to address the growing number of aged individuals in the nation. Through research grants and training funds, the institutions of the Association of Minority Health Professions Schools are capable of assisting the National Institute on Aging in critical aging research issues as well as training professionals in the speciality area of geriatrics and gerontology health care.

Thank you for the opportunity to present the views of the Association of Minority Health Professions Schools. I am pleased to respond to any questions you may have.

STATEMENT OF HON. JACOB K. JAVITS, FORMER U.S. SENATOR FROM NEW YORK

ACCOMPANIED BY DR. GUY McKHANN, PROFESSOR AND CHAIR, DEPARTMENT OF NEUROLOGY, JOHNS HOPKINS

Senator WEICKER [presiding]. The committee will come to order.

As usual, it is a great privilege to have Senator Javits before the committee. I might add that I wish we would all do with our lives, what the Senator does with his life on behalf of a lot of other people.

I know that he was a power when he was in the U.S. Senate, but I really, truly have come to the conclusion Senator, that you are a greater power today outside of this body. Welcome.

Senator JAVITS. Thank you very much, Mr. Chairman.

Senator PROXMIRE. May I just say a word, too, on behalf of the Democrats who felt Jack Javits was a marvelous Republican but an even better Democrat. [Laughter.]

I want to tell you that I have served in the Senate with a lot of very, very brilliant people, and I greatly admire the Senator. I have been in the Senate now for 28 years, but there has never been a mind that has been as amazingly sharp as Senator Javits'. I would sit in the committee for weeks during hearings on a bill and when we would bring the bill to the floor I was astounded to find that Senator Javits had a complete grasp of the legislation. Usually when a Senator hasn't participated in committee deliberations he doesn't know what he is talking about, but that was not true of this gentleman. He always knew. He set a great pace for the rest of us.

The great thing about Jack is that he has done something with his intellect which very, very few bright people have done. He has used it in a marvelous, compassionate and uplifting way for our country.

Senator JAVITS. Thank you, Senator.

Senator WEICKER. Senator D'Amato?

Senator D'AMATO. Mr. Chairman, of course it is a great honor to see our great, distinguished Senator from the State of New York, but not only as a Senator, when I knew him as well, but thereafter as he continues to fight for all of his constituents in the State, throughout this Nation, and for mankind. I am deeply honored and it is a privilege to be able to hear our Senator once again.

Senator INOUYE. Senator Javits is very special. His son is going to marry my legislative assistant. [Laughter.]

Senator WEICKER. I think you should excuse yourself from the hearing. [Laughter.] From this grilling that is about to take place.

Go right ahead, Jack.

Senator JAVITS. Gentlemen, I am very grateful, and a life is better spent with such approval as you have given to me. And knowing me as you do, you are sure that my head will remain exactly the same size. I love it just the same.

I appear today, as you have allowed me to appear before, as a witness in support of appropriations for the National Institutes of Health, and specifically the National Institute of Neurological and Communicative Disorders and Stroke. I have a certain right to speak in this matter as I am myself one of those afflicted with a seemingly so far insoluble disease called amyotrophic lateral sclerosis, popularly known as Lou Gehrig's disease, from which I have suffered. This is the fifth year.

PREPARED STATEMENT

Now, I will not stick to my text exclusively, but I file it with the committee. It represents my views completely. But I will summarize.

First, and foremost, let me thank the committee which has been unusually perceptive, which has been deeply informed in this field, and which has charted a new and constructive direction for medical research for a very deeply affected and almost hopeless body of patients, numbering, I am sorry to say, several million, if you include those who suffer from Alzheimer's disease. And I ask unanimous consent that an article in the New York Times of this very morning on the hopelessness of 2 million of these patients, their families and friends, be made a part of my testimony.

Senator WEICKER. Without objection.

[The statement follows:]

STATEMENT OF HON. JACOB K. JAVITS

I appear today as a witness to testify in support of appropriations for the National Institutes of Health, specifically for the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS). I am myself afflicted with one of them, amyotrophic lateral sclerosis (ALS), also popularly known as Lou Gehrig's Disease.

There are many voluntary health organizations in respect of these diseases in our country which are doing splendid work in stimulating research and greatly assisting in patient care. I am myself a director of one of them, the ALS Association, a new merger of the National ALS Foundation and the ALS Society of America of Sherman Oaks, Calfornia, which now consolidates the two voluntary organizations in this field, and I have worked with the Muscular Dystrophy Association and many others. They have also combined in the National Committee for Research in Neurological & Communicative Disorders in the effort to get adequate appropriations for research in this field. The NCR will be appearing before this Subcommittee as well.

You have given enormous encouragement to all of these patients and to their families by the enhanced appropriations in the sum of about 100 million dollars, an approximately one-third increase in the fiscal years 1984 and 1985 over fiscal year 1983. You have helped bring hope where there has heretofore been little hope, and to bring nearer the day when, like the great strides in dealing with heart disease, cancer and even neurological diseases like polio, we may crack the riddle which these neurological and neuromuscular diseases have presented up to now. Also, I would like to thank my former colleagues in the House and Senate for the honor they have given my family and me in linking my name with this effort.

It is vital to note that we are dealing here with a subject of grave human consequence. All of you will recall the determination which began in the late 40's and came to fruition in the 60's and early 70's that we were determined to reduce the toll of mortality of victims of heart disease and of cancer. As a Congressman and a Senator I had the inestimable privilege of being myself a party to these efforts in which voluntary organizations were also of great help.

In the neurosciences we deal with the "living dead" -- men and women who are disabled by our failure as yet to crack the riddle of neuromuscular and neurological diseases like my own ALS, Alzheimer's, Huntington's, Multiple Sclerosis, Muscular Dystrophy, an estimated total of forty such diseases, men and women who live for varying periods of time but who are progressively and profoundly disabled by these diseases while alive. They impose tremendous responsibility on the communities and on the health facilities of those communities in which they live, putting a grave strain upon their families and friends, and not only upon their own physical but also their financial resources and their resources of spirit and determination.

There are hundreds of these cases among men and women who are an inspiration to the thousands who suffer, because at the same time they continue to lead creative and productive lives, notwithstanding their great disabilities. But the tens of thousands who suffer and are not sustained in this way and their families and friends are sustained by the hope you give them through Congressional appropriations.

The scientists and the doctors tell us that we are now ready for a breakthrough in this field. I would like to quote for you one paragraph from a report dated October, 1983 developed in response to a request of the Senate Appropriations Committee in conn-ction with appropriations to NINCDS for fiscal year 1983 on the research opportunity and the research needs for this Institute. This report was commissioned by the NIH and used the input of a panel of 25 experts in the basic and clinical neurological and communicative sciences to assess the status and needs for research in these areas. The last paragraph of the Introduction, bearing the title: The Neurosciences: An Explosion of New Methodologies, Opportunities and Challenges, reads as follows:

> "The prospect for understanding the functions of both the healthy and the diseased human brain in the exact terms of the neuroscientist has never been greater. Truly, we are entering a new era, a decade of brain research in which prevention or repair of neural disorders becomes a real possibility and in which every human mind may eventually realize its full intellectual and emotional potential."

This is essentially the theme of my testimony today. This is the basis of the managerial responsibility carried by Dr. James B. Wyngaarden, Director of the NIH, and Dr. Murray Goldstein, the director of the institute most directly affected.

I come now to a report on what has been the result of your actions on this issue. My own report will implemented by the distinguished testimony to follow, that of Dr. Guy McKhann of Johns Hopkins whom Dr. Fred Plum of New York Hospital, who testified with me last year, invited to testify this year, due to Dr. Plum's absence in the Peoples Republic of China, and for which I am very grateful.

The fiscal year 1985 NINCDS appropriation has demonstrated the opportunities available for significant accomplishment in the understanding of how the brain and human nervous system function in health and disfunction in disease.

Through your 1985 appropriations Neuroscience Investigator Awards have now become the national model for the support of individual investigators of demonstrated accomplishment. In this program proven investigators with a demonstrated track record for consistent productivity are supported for a 7-year period. The NINCDS plan is to provide 250 such awards. 100 have been awarded to date. Recent cutbacks in NINCDS funding have seriously interfered with the achievement of this goal. Funds should be provided in fiscal year 1986 for 60 additional awards.

Planning for Neuroscience Research Centers of Excellence made possible by your 1985 appropriations have resulted in applications to NINCDS from 55 of the outstanding teams of neuroscientists in the country to explore in depth the frontiers of the human nervous system. 12 applications have been identified as being of such importance that they offer our nation the opportunity to make major advances in neuroscience. Because of the OMB allowance for 1985, only three or four can be funded this year. It is imperative that we move ahead with vigor in fiscal year 1986 to take advantage of the possibilities that have been demonstrated to be available. Areas to be studied include the molecular basis of brain organization; the biological forces that control brain development in the young; infectious particles so small that they cannot yet be seen but could very well be the basis of several of the chronic neurological diseases; and the biological basis of progressive hearing loss in the aging population.

Brain Imaging Research Centers: In 1985 the Congress supported the concept of brain imaging research centers in which the most modern methodologies of brain anatomic, electrical and biochemical imaging would be coordinated to study the workings of the human brain in health and disease. This program offers the promise of unravelling the problems of ischemic stroke, brain tumors and epilepsy. The pilot program initiated in 1985 should be brought to fruition in 1986.

Research Equipment: Finally, a new need of highest priority has been brought to my attention -- the need to provide the sophisticated research equipment necessary for modern neuroscience, the need to provide our neuroscience laboratories with the equipment that is necessary to apply the technologies developed in molecular biology to, for example, the problems of Huntington's Disease, ALS and Alzheimer's Disease. A one-year program of $25 million should be given the highest priority so that the tools will be available to address these problems of national need.

Based upon this record and these experiences and the exciting opportunities that now arise in the neurosciences, of which we must take advantage while the need and the opportunity match, I would hope that the order of magnitude of the precedent appropriations would be maintained. I am well aware of the financial pressures with which the members must contend, but there comes a time when the chance of major breakthroughs is so great that it must be availed of. Those whom I call the "living dead", the victims of neuromuscular and neurological diseases, now stand where cancer and heart disease stood some years ago. Up to now their cause seemed hopeless. Now progress in the neurosciences to help them seems within sight. Their hopes are legitimate. They should now be helped on their way.

[From the New York Times, Tues., May 7, 1985]

ALZHEIMER'S DISEASE: FAMILIES ARE BITTER

WASHINGTON, May 6 — These are frustrating days for victims of Alzheimer's disease, an incurable mental deterioration that robs some two million Americans of their memories and reasoning abilities.

The volume of research on Alzheimer's has jumped sharply in recent years, and exciting discoveries are emerging from the nation's laboratories every week. But almost none of this vigorous scientific activity is yet having any impact on the victims and their hard-pressed families.

'Horror Stories' Recounted

Even the best medical facilities can do little for Alzheimer's patients except provide good, conventional medical care to prevent additional illness that might complicate the underlying disease. Unfortunately, the vast majority of doctors and nursing homes fail to provide even this limited treatment, according to relatives who related their personal "horror stories" at an unusual conference for family members of Alzheimer victims held at the National Institutes of Health last week.

Many family members complained bitterly about the lack of skilled nursing facilities for Alzheimer's patients, the failure of Government insurance programs to pay for needed care during the prolonged period of deterioration, and the absence of counselors and programs to assist families in coping with patients who become confused, incontinent and sometimes abusive. All too often, as they described it, the care provided is ignorant, indifferent, callous or even destructive.

Frustration Is Acute

Their laments were typical of the frustrations felt by victims of many major killer diseases, ranging from cancer to heart disease to stroke. There is often a feeling that science is capable of a major breakthrough which, if it would come just a little bit faster, might well save the patient. But with Alzheimer's, the frustration is particularly acute. The disease is so newly a focus of concern that no one has any idea where the onrushing research is headed or when it might produce practical payoffs. And the disease is still so mystifying that many doctors remain ignorant of how best to recognize and treat it.

The hit-or-miss quality of current treatment efforts was spotlighted by Margaret M. Heckler, secretary of health and human services, who told the conference that an astonishing 15 percent to 30 percent of all diagnoses of Alzheimer's disease may be incorrect. Several experts at the conference agreed that Alzheimer's disease has become a "garbage pail" diagnosis, a catch-all term to describe any elderly patient whose mind is deteriorating for reasons that are not immediately obvious.

As a result, the experts say, many patients who suffer from depression or other mental diseases that could be effectively treated if diagnosed properly are being mislabeled and given no treatment at all on the assumption that they are incurable Alzheimer's.

Disease Kills 100,000 a Year

Alzheimer's itself has a devastating impact on both its victims and their harassed families. It typically starts with a barely noticeable loss of memory that becomes progressively worse. Eventually the patient cannot remember the previous sentence in a conversation, or follow a television show, or identify close family members. The patient may become anxious, agitated, irritable, wander about in confusion, throw temper tantrums, and forget how to dress or read or make change. In the late stages, which can come in months for some people, after 10 or more years for others, the victims are totally incapable of taking care of themselves.

Virtually all Alzheimer's patients die earlier than they would have without the disease. Alzheimer's kills some 100,000 Americans each year, either because the brain deterioration itself shortens life or, more likely, because its victims take such poor care of themselves that diseases such as pneumonia take a high toll.

Although the risk of Alzheimer's increases with advanced age, the disease can also strike in midlife; many relatives last week described victims in their forties or fifties. But most victims are elderly. The disease strikes 5 percent to 7 percent of those over age 65 and 20 percent of those in their eighties.

Nobody knows whether the incidence of Alzheimer's has been changing in recent years — many experts suspect it has not — but as the elderly population grows larger, the absolute number of cases is rising in this country. What seems to be happening, some experts say, is that people are living longer and medical science is protecting them from many other ailments, so more people are eventually succumbing to Alzheimer's.

Pace of Research Is Dramatic

The disease was first described in 1907 by the German neurologist Alois Alzheimer but it is only in the past decade or two that it has received major research attention. By one recent count, the number of scientific articles on Alzheimer's published annually jumped 20-fold from 1969 to 1983. By another informed estimate, the number of scientists studying the disease in the United States has jumped at least tenfold since the late 1970's, reaching a current level of perhaps 300 scientists, drawn from a widening range of scientific disciplines.

"The pace has been very dramatic," said Zaven Khachaturian, chief of the Alzheimer's program at the National Institute on Aging, in a telephone interview. "The major discoveries are coming on a weekly basis now, not months or years but weeks. I'm very optimistic that within our lifetime we'll see some major breakthroughs."

"The record is remarkable as we look back over the past decade," Joseph T. Coyle, professor of child psychiatry at the Johns Hopkins School of Medicine, told last week's conference, in a summary of the state of research.

Biochemical Abnormalities Found

One of the major advances over the past decade, as described by experts at the conference and elsewhere, was the discovery that Alzheimer's patients often suffer from certain biochemical abnormalities in the brain. Most strikingly, they lack an enzyme that helps produce a key chemical messenger, or neurotransmitter, known as acetylcholine, which is involved in both learning and memory. Other neurotransmitters are often in short supply as well.

If such chemical imbalances prove to be a major cause of Alzheimer's, there is hope that drugs might be found to restore the chemical levels. Thus far, however, the drugs investigated have proved ineffective or modestly effective at best.

In other recent reports that are exciting interest, scientists have found similarities in protein fragments found in the damaged areas of the brain and in the brain's blood vessels, suggesting, perhaps, that they are slowly moving closer to finding an underlying fundamental cause.

Virtually all of the findings thus far are considered clues rather than answers. In the January issue of Scientific American, Richard J. Wurtman, professor of neuroendocrine regulation at the Massachusetts Institute of Technology, sets forth six hypotheses that have been proposed for the cause of Alzheimer's disease. The possibilities include faulty genes, an infectious agent, an environmental toxin such as aluminum, inadequate blood flow and energy metabolism, abnormal accumulations of proteins, and, the one which has excited the most attention, biochemical abnormalities involving neurotransmitters. Each of these hypotheses may turn out to be correct in some limited sense, Dr. Wurtman suggested, but the essential explanation of Alzheimer's may be something more fundamental that would embrace them all.

'Sentence of Mental Emptiness'

Meanwhile, until scientists learn more about the disease, nothing can be done to save today's victims from progressive deterioration. "A diagnosis of Alzheimer's disease today carries with it a sentence of eventual mental emptiness," according to a Government guide for health practitioners.

As Secretary Heckler described it last week, "We cannot yet prevent the disease; we cannot cure it; we cannot yet reverse its course; we cannot stop its progression."

But, she stressed, the degree of impairment of Alzheimer's victims can be reduced and the quality of their lives can be improved by detecting and treating such "excess disabilities" as depression and delusions, using medication and behavioral therapies.

"Incurable does not mean untreatable," Burton V. Reifler, founding director of the Alzheimer's Research Program at the University of Washington, told the conference in describing the program at a clinic in Seattle where he has treated 1,500 patients over the past seven years.

The clinic does a thorough diagnostic examination of each patient in which the single most important element is that classic medical tool: a history of the patient obtained from family members. The patient is also given physical and mental examinations, laboratory tests, and, on a selected basis, such advanced tests as the so-called CAT scan, which provides a picture of the gross structures of the brain. "The high technology diagnostic procedures are very exciting," Dr. Reifler said, "but in the day-to-day practice of diagnosing Alzheimer's disease at the moment, they don't have a major role."

As for therapy, Dr. Reifler seeks to preserve the patient's ability to function through day-care center programs and other activities; treats depression, paranoia and other co-existing illnesses; eliminates unneeded medicines that may make patients feel worse; suggests changes in the home environment that make it easier for the patient to function; and counsels the family in how best to cope with the emotional and financial problems.

Complaints of Irresponsible Care

But in most areas of the country, testimony from the relatives indicated last week, treatment has been far less painstaking, although it is slowly getting better. Many patients were said to be overmedicated or put in restraints by nursing home attendants who could not cope with their confused actions. There were complaints that one neurologist offered his professional diagnosis after only a 10-minute examination, and that another callous doctor told a widow she probably did not want her confused husband around the house anyway. One doctor's prescription for a woman in the early, mildest stages of Alzheimer's disease was to "exercise her brain more" because "her brain was getting lazy." Many relatives reported great difficulty finding nursing homes or day-care centers willing to accept Alzheimer's patients.

Nancy Mace, a member of the Maryland Task Force on Alzheimer's Disease, told the conference that some treatment facilities are learning to improve the functioning and quality of life of Alzheimer's patients. But she lamented that "these success stories are rare" and are "far outnumbered by stories of patients suffering and families suffering."

The conference was co-sponsored by the Federal Department of Health and Human Services and the Alzheimer's Disease and Related Disorders Association, a private group with 125 chapters in 44 states and the District of Columbia.

Senator JAVITS. You have given hope where none existed. And the Senate knows as well as I that research in this order of magnitude is impossible except from Government. It just cannot come from private sources, which are only able to help because Government lays the basis.

Now the strategy which you have implemented has been very important in giving hope where literally none existed. You have espoused the strategy of now giving a great thrust forward of research in the neurosciences, sciences of the brain, which follows rather extraordinary successes in respect of cancer and the heart while I was here. We took a consciousness in the late sixties and the early seventies with what was then called a cancer pact which coordinated a great effort in that field. And the rate of mortality, whether it is breast cancer or cervical or many other types of cancer, has been very materially reduced as a result. Cancer is no longer a certain sentence of early death.

We then moved the same way into heart disease. Indeed, the earliest of my own legislative efforts was the National Institute of Heart Disease which, with the help of then Senator Pepper of Florida, was installed in the National Institutes of Health. And that, too, has had an extraordinary result in reducing not only mortality but the after-effects of heart attacks and stroke and the methods of treatment, et cetera.

Since 1983, this committee—and I pinpoint it because it is deserved—moved into the neurosciences and apparently there is a great hope for human progress in our understanding of the brain and its capacity. Because as we all know, we only use a small fraction of it today, the scientists tell us, and especially in dealing with this problem of some millions of Americans who suffer from 40 of these diseases and up to the last year or two, when you gentlemen on this committee stepped in, saw no hope whatever and now begin to see some, a glimmering of hope. You have only been at it for 2 years, and of course we know that that is too early for a breakthrough, but a great deal has been done to set the stage for a breakthrough in what was hopelessness up to now and hopelessness of a very cruel kind, because these are very costly illnesses to take care of. I mean the victims are disabled almost completely and they don't die very quickly. I am being very realistic. And in the meantime, it is such suffering as to have caused me to testify before you in their behalf as the living dead, which is what they really are.

Now, what has happened? In 1985, through the efforts of members of this subcommittee, the appropriations has increased accumulatively by $100 million. And the NIH in a very innovative program has expanded its research assistance to a scientifically investigated, well demonstrated track record for consistent productivity so that they would have, each of them, up to 7 years of support for continuing research, as contrasted with a maximum of 4 years prior thereto.

The NIH believes that it needs to provide 250 such awards. Because ofthe appropriations which you have provided by your advocacy and your contribution in this subcommittee, with the chairman and its members, 100 such awards have been made to date. One of them was made at the university where I have my official papers, which is the State University of New York at Stony Brook.

In order to be informed, I attended the lecture which a Dr. Federmacker gave to show what he was researching, which happened to be, and Dr. McKhann will explain it if you wish, the ganglia of the brain. And it opened up such extraordinary vistas of man's knowing what he is all about and what ails him. If I were completely ignorant of science, which I probably am, it would open my eyes and that of any other thinking person to the new world which we are now opening up, which you have done. I hope you will forgive me for being so contrite, but that is the fact of the matter.

The other program that NIH wants to pursue, which will include 60 more of these awards to individual investigators, is to pursue the planning which they have now done based on these enhanced appropriations for studies in the neurosciences, which was made possible by the 1985 appropriations. They have applications from 55 of the outstanding teams of neuroscientists in the country to explore in depth the frontiers of the human nervous system. Twelve applications of these 55 have been identified as being of such importance that they offer our Nation the opportunity to make major advances in the neurosciences.

Now, the Office of Management and Budget has restricted what NIH can use, and they feel that only three or four of these centers can be funded this year. But that depends on their appropriations for fiscal year 1986.

Just two brief points. In 1985, the Congress supported a concept which they designated as brain imaging research centers in which methodologies of atomic electrons and biochemical imaging of the human brain in health and disease may be studied. This program, a pilot of which was initiated in 1985, they feel should be brought to fruition in 1986. I hope that Dr. McKhann, who accompanies me today, and I hope you will hear very shortly, might tell us more about that.

NIH feels that another problem for that is research equipment, which is very short and which they hope that you can help with.

I conclude as follows. Based on this and these experiences and the exciting opportunities which now exist in the neurosciences, I beg you to consider completely within the context of the financial pressures which this subcommittee in common with the Senate must contend with that there comes a time when the chance of major breakthroughs is so great that it must be there. I hope very much that to the extent you will find possible, you will continue to give the support which the neurosciences and the living dead only tend to hope to redeem. You give them more hope than they have had for years, and most of which, because of you, they have today. Thank you.

Senator WEICKER. Jack, thank you very, very much for your eloquent, knowledgeable, passionate testimony.

Senator JAVITS. Thank you.

Senator WEICKER. We have a vote on, which actually has run out of time.

Senator JAVITS. You go right ahead.

Senator WEICKER. This was more important. I think what I would like to do is to have the oportunity to talk to Dr. McKhann possibly when I get back, Jack. I think I will have other witnesses step up. We are running quite late because of the voting. So I will just recess here for about 5 minutes while we vote, and I hope you will be here so you can also give a personal account.

Senator JAVITS. I will. Can we give Dr. McKhann 5 minutes, when you come back?

Senator WEICKER. When I come back we can. I will ask Dr. McKhann to make it a short 5 minutes because I have many doctors here to testify.

Senator JAVITS. Thank you.

Senator WEICKER. Thank you, gentlemen.

The committee will recess for 5 minutes.

[A brief recess was taken.]

Senator WEICKER. The committee will come to order.

We have 16 witnesses left. The hearing is supposed to end in 1 minute. [Laughter.] So if you all can give your testimony in 1 minute, it would be greatly appreciated by the Chair.

Dr. McKhann, why don't you proceed for a few minutes.

Dr. MCKHANN. Thank you, Senator. I will be brief. I will just make three points.

The first is that we probably have learned more about the brain in the last 5 years than we did in the previous 50. I am a neurologist and the challenge to us is to apply this knowledge to human disease. I can't accept the idea that things have to be inevitable, that we can't alter them.

I would like to use a second analogy, Senator. The Washington Redskins don't go down to the 10 yard line and walk off the field. That is what could happen to the momentum we have in our research. We have the right people, we have a tremendous excitement in young people on the nervous system. Cutting off research at that point would be a disaster.

I further feel if we are not going forward, we are going backward. I really agree with the Senator that we are making breakthroughs and are on the verge of breakthroughs. We don't get an opportunity like this very often. I would like to thank you and your colleagues for what you have done in the neurosciences last year. I would like particularly to thank you for focusing on this issue now.

On the number of grants that is required to keep the funding moving, I would like to urge you to continue that and to thank you for your efforts.

Senator WEICKER. You can rest assured that, Dr. McKhann, we will do just that. My thanks to the efforts of people like yourself, Senator Javits, who has spoken so eloquently over the years for the work of NIH. I expect we will make progress, probably smaller progress than I would like, considering the proposals the administration has as far as the budget is concerned. But I think we will make progress.

Believe me, the investments that are made today will be out there for the benefit of a lot of people, millions, in the future.

Senator JAVITS. Thank you. Last year I appeared with Fred Plum.

Senator WEICKER. That is right. I remember well.

Senator JAVITS. He begged to be excused because he is helping the Chinese. It is he who named Dr. McKhann to testify in his place.

Senator WEICKER. I have one mundane comment, Jack, I would like to get off my chest. With all the great research that is going on and the grants and the tremendous knowledge of neurology that Dr. McKhann and Dr. Plum and the rest have, I would suggest that someone apply themselves to a very routine matter, that of your machine there that assists you in breathing, in the sense when I visited you at the hospital, I recall all of a sudden the plastic tube became uncorked from the machine, and I don't know how you felt, but I damn near got a heart attack when I saw that. [Laughter.] Finally a very industrious nurse popped onto the scene, got a roll of Scotch tape and taped that thing back together again.

Like I say, with the millions we are talking about, and we are pushing the frontiers of science, I think we can do better than Scotch tape on that thing. I don't mean to demean my friends at 3M. [Laughter.] But I am glad you are still here and I am still here, having witnessed this particular scene in the hospital.

Senator JAVITS. Senator, life is very precarious, even more precarious for people like me. That is why I am here. That is why I am so grateful for your leadership and that of Bill Proxmire and what has been done. Thank you so much.

Senator WEICKER. God bless you. It is always good to see you.

I think you are having a birthday party, I believe, in New York in a couple of weeks. I will be up there.

Senator JAVITS. Wonderful. Thank you.

STATEMENT OF IRVING WRIGHT, M.D., AMERICAN FEDERATION FOR AGING RESEARCH

Senator WEICKER. Dr. Irving Wright of the American Federation for Aging Research. Dr. Wright, please be seated, and we look forward to your testimony.

Dr. WRIGHT. Senator Weicker, it brought back a lot of memories to me to hear Senator Javits speak because I have testified before him for at least 35 years in behalf of research in heart disease. Now I am back again, this time in terms of a plea for research in the multiple problems of aging.

My testimony is before you and time is short, and we have many people to consider, so if you don't mind, I will just hit a few high spots in consideration of the situation.

Senator WEICKER. Go right ahead.

Dr. WRIGHT. It was much more important to hear what Senator Javits had to say.

I would like to make one point, and that is that there is nothing more important in the problems of health in the elderly than additional research. You have before you the proposed budget of NIA, and I will not elaborate on any particular points, except to say that I approve of the budget as requested but feel that it is very limited in terms of the magnitude of the problem we are confronting and the newness of the institution. I think the Institute is one of the newest Institutes and should not be cut back in any respect but should be encouraged to improve because the problem they are facing is as great as any of the whole health problems of the world. But they have not had a chance to develop their program fully, as in the case of the Heart Institute, which I testified for for many years, and cancer, and so forth.

There is one point that is very basic, and that is in our understanding of the problems of aging, the socioeconomic aspects are enormously important. We do need to spend money for them. But in the long run, they do not result in the decreasing of the incidence of the disease, and the way to save money, taking a long view, is to have fewer cases of these diseases, and the diseases we have are enormous.

First of all, the basic approach that we need is to understand the mechanisms of aging. We do not understand them in the way that we should. We need a great deal more in the way of investigation in the genetic, mollecular, cellular, organismal levels. That takes time, over a period of years, but it helps us to understand some of the key problems.

For example, why do women live longer than men? Is it hormonal or the difference in exercise? Many of the women I see are moaning the loss of their very athletic husbands. They have been active, too, but to a less extreme degree.

We really do not know the answers to some simple things like that. We do not know why some people are old at 50 and other people are young at 80 or 90. What about progeria, this remarkable disease that afflicts children, which we are helping to finance, where a child ages 10 times the normal rate and at the age of 10 appears and seems to have all of the possible diseases of a person who might be 90 or 100. And the loss of immunity. These are very important.

The diseases are multiple and I think it is great that some of them receive more attention than they ever did before, but I don't think we should turn away from other diseases that also afflict millions, including of course osteoarthritis, the blindness which was mentioned so well today, and the renal diseases, and innumerable other diseases that afflict the elderly. We must keep a balance in the proportion of our grants and our studies.

We have to study these because these are not diseases that are isolated and only a few patients involved. Any one of the ones which I have mentioned, and a number of others, one breakthrough would involve and help the lives of 1 million or more people, sometimes 3 or 4 million people, and over a period of years much more than that.

Now one thing, to turn a little bit away from research, is the matte of training. Our medical schools today are trying to gear up to teaching more about the problems of aging and have our medical students understand more about it. Unfortunately, they are not prepared to do this except in a few instances. Most of the medical schools cannot today mount a first-class teaching program in geriatrics. Why? Because we didn't start 10 or 20 years ago educating and training men and women in this field so our health program in terms of training is way behind. After all, it is only 6 years since the first endowed professorship of the United States in geriatrics was given, and it is only 2 years since the first fully developed medical department that Bob Butler has put together at Mount Sinai has really gotten operating. This is a very key situation. I think we must train and finance training to a greater degree than we have ever done before, both within the extramural and intramural. If we don't have the young investigators and the young trained professors, we are not going to turn out the proper number of doctors to take care of these people.

I should like particularly to commend the Baltimore longitudinal study which has been going on, as you know, for 26 years. It has provided us with an enormous amount of material and it exemplifies the importance of long-term studies. A study for a year or so may hit the jackpot, but long-term studies give you information that you cannot get any other way. I think that this is a very important thing.

I would also like to bring to your attention the value of collaboration between organizations. The Federal institutions and the National Institutes of Health, which I have been involved with for many years, on a voluntary basis, and the voluntary agencies, such as Heart and Cancer and now the American Federation for Aging Research, were out there getting money for young investigators working closely with the National Institute of Aging, and some of their people will be benefited by our fellows. This is a very collaborative effort and a very positive one.

The rest of my material is in this document. I feel that out of consideration I should not press that.

PREPARED STATEMENT

Senator WEICKER. Thank you very much, Dr. Wright. Your statement in its entirety will be included in the record.

Dr. WRIGHT. Thank you.

[The statement follows:]

Statement of Dr. Irving Wright

MISTER CHAIRMAN, MEMBERS OF THE COMMITTEE - IT IS A PRIVILEGE TO ADDRESS THIS COMMITTEE WHICH IS KNOWN FOR ITS CONCERN FOR THE PROBLEMS AFFECTING OUR OLDER CITIZENS.

I AM IRVING S. WRIGHT, M.D., EMERITUS PROFESSOR OF MEDICINE, CORNELL UNIVERSITY MEDICAL COLLEGE. I AM ALSO THE FOUNDING PRESIDENT OF THE AMERICAN FEDERATION FOR AGING RESEARCH (AFAR), A VOLUNTARY AGENCY ESTABLISHED FIVE YEARS AGO TO ENCOURAGE AND FUND RESEARCH ON AGING. FOR THIRTY-FIVE YEARS I ENGAGED IN MEDICAL RESEARCH LARGELY DEALING WITH CARDIOVASCULAR DISEASE AT THE POST GRADUATE MEDICAL SCHOOL OF COLUMBIA UNIVERSITY AND AT THE CORNELL UNIVERSITY MEDICAL CENTER. I WAS HONORED TO HAVE THE FIRST ENDOWED CHAIR IN GERIATRICS IN THE UNITED STATES ESTABLISHED IN MY NAME AT CORNELL UNIVERSITY MEDICAL COLLEGE IN 1977 BY THE GLADYS AND ROLAND HARRIMAN FOUNDATION. I HAVE ALSO SERVED AS PRESIDENT OF THE AMERICAN HEART ASSOCIATION (1952-1953), THE AMERICAN COLLEGE OF PHYSICIANS (1966-1967), AND THE AMERICAN GERIATRICS SOCIETY (1971-1972). AT THIS TIME I WOULD LIKE TO SUBMIT A STATEMENT AS A PRIVATE CITIZEN ON BEHALF OF THE APPROPRIATION FOR THE NATIONAL INSTITUTE ON AGING (NIA) OF THE NATIONAL INSTITUTES ON HEALTH (NIH).

LET ME SAY AT THE ONSET OF MY TESTIMONY THAT THERE IS NOTHING MORE URGENT IN THE FIELD OF HEALTH CARE FOR OUR AGING POPULATION THAN TO SUPPORT RESEARCH INTO THE CAUSES AND CURES OF THE DISEASES WHICH DISABLE SO MANY OLDER AMERICANS.

THE BUDGET PRESENTED BY THE NATIONAL INSTITUTE ON AGING IS IN YOUR HANDS FOR DETAILED STUDY.

I HAVE REVIEWED AND APPROVE OF THE PRESENTATION BUT COMMENT THAT THE FUNDING FOR BIOMEDICAL RESEARCH ON AGING IS STILL VERY LIMITED IN PROPORTION TO THE MAGNITUDE OF THE PROBLEM AS IT EXISTS TODAY AND THIS WILL BE INCREASINGLY SERIOUS AS THE FUTURE DEMOGRAPHY OF OUR POPULATION CONTINUES ON ITS PRESENT COURSE. I REGARD IT AS REGRETTABLE THAT THIS YOUNG DEVELOPING INSTITUTE SHOULD HAVE A CUT-BACK IN STAFF WHICH SERIOUSLY IMPAIRS THE PROGRAM FOR TRAINING JUST WHEN WE NEED MORE TRAINED PERSONNEL THROUGHOUT

THE COUNTRY. THIS SHOULD BE RECTIFIED. WE MUST DO BETTER THAN THIS OR THE NEXT TWENTY YEARS WILL PRESENT EVEN MORE OVERWHELMING PROBLEMS.

IN VIEW OF THE FACT THAT THE INSTITUTE ON AGING HAS ONLY RECENTLY ENTERED THE FIELD IN COMPARISON WITH THE OLDER LONG ESTABLISHED INSTITUTES AND THE MAGNITUDE OF THE OVERALL TOTAL PROBLEM IT ADDRESSES IS AS LARGE (ALTHOUGH NOT SO WIDELY RECOGNIZED) AS THE OTHERS, CONSIDERATION SHOULD BE GIVEN TO GRANTING THE FULL BUDGETARY NEEDS RATHER THAN CUTTING BACK. WE NEED MORE, NOT LESS RESEARCH IN THIS FIELD.

THE IMMEDIATE DAY-TO-DAY NEEDS OF THE ELDERLY REQUIRES SUPPORT IN TERMS OF CARE FACILITIES AND MEDICAL SERVICES AVAILABLE IN THE LIGHT OF OUR PRESENT KNOWLEDGE. THE BASIC PROBLEM IS THAT WHILE ENCOURAGING PROGRESS IS BEING MADE, OUR KNOWLEDGE TO THIS MOMENT IS LACKING IN TERMS OF THE PREVENTION, SATISFACTORY TREATMENT OR CURE OF SOME OF THE KEY MAJOR DISEASES DISABLING THE ELDERLY INCLUDING CHRONIC OSTEOARTHRITIS, BLINDNESS DUE TO MACULAR AND RETINAL DEGENERATION, DEMENTIAS INCLUDING ALZHEIMER'S DISEASE - LOSS OF IMMUNITY AGAINST INFECTION AND CANCER - INCONTINENCE AND MANY OTHERS.

ONE OF THE MOST IMPORTANT UNANSWERED QUESTIONS IS WHY WOMEN LIVE AN AVERAGE OF 5-8 YEARS LONGER THAN MEN. HORMONAL STUDIES SHOULD BE EMPHASIZED BUT OTHER FACTORS INCLUDING EXERCISE SHOULD BE EVALUATED. THERE ARE 220 WOMEN FOR EVERY 100 MEN OVER THE AGE OF 85. MANY OF THEM HAVE LOST ATHLETIC HUSBANDS BUT THEIR FORM OF EXERCISE HAS BEEN MORE MODERATE BUT CONSTANT, IF NOT SO EXTREME.

MANY OTHER FACTORS ARE ALSO WORTHY OF STUDY. WE ARE SPENDING BILLIONS OF DOLLARS TO PROVIDE MEDICAL CARE FOR THESE AMERICANS BECAUSE WE BELIEVE IN A HUMANE AND GENEROUS SOCIETY. BUT IF WE WERE ABLE TO PREVENT OR CURE SOME OF THESE DISEASES OUR PEOPLE COULD LEAD MORE MEANINGFUL LIVES AND THE ECONOMY OF THE COUNTRY WOULD BE IMMEASURABLY BENEFITTED. THE ONLY APPROACH TO THE REDUCTION IN THE INCIDENCE AND THE DEVELOPMENT OF CURES IS BY MEANS OF BASIC BIOMEDICAL AND SOLID CLINICAL RESEARCH.

WE ARE NOW CONFRONTED WITH THE FACT THAT 27,000,000 PERSONS IN THIS COUNTRY ARE OVER THE AGE OF 65 AND THAT THIS SEGMENT OF OUR POPULATION WILL MORE THAN DOUBLE DURING THE NEXT 30 TO 40 YEARS.

WE NEED RESEARCH INTO THE PHYSICAL AND MENTAL STATUS OF THE OLD, ELDERLY, THOSE OVER 85 - THE MOST RAPIDLY GROWING SEGMENT OF OUR POPULATION. BY THE YEAR 2000 THE POPULATION OVER 85 WILL HAVE DOUBLED TO APPROXIMATELY 5.4 MILLION. THEY WILL REQUIRE SPECIAL STUDY REGARDING THEIR ILLNESSES BUT ALSO WHY SOME OF THEM REMAIN IN ROBUST HEALTH

OUR MEDICAL SCHOOLS ARE ONLY BEGINNING TO ACQUIRE TRAINED FACULTY IN GERIATRICS, AND RESEARCH ON AGING BUT THEY ARE STILL GROSSLY UNDERSTAFFED AND UNDERFUNDED. THIS IS ESPECIALLY SERIOUS SINCE IT IS ESTIMATED THAT TODAY'S MEDICAL STUDENTS WILL SPEND SOME 75% OF THEIR TIME IN MEDICAL PRACTICE CARING FOR THE ELDERLY. THE COST OF PROVIDING MEDICAL CARE FOR THIS SEGMENT OF OUR POPULATION IS INCREASING TREMENDOUSLY.THIS 12% OF OUR POPULATION ACCOUNTS FOR 29% OF HEALTH CARE COSTS, USES 25% OF PRESCRIPTION DRUGS, ACCOUNTS FOR 34% OF ALL DAYS IN SHORT STAY HOSPITALS AND COMPRISES 87% OF ALL NURSING HOME RESIDENTS. THIS IS FURTHER ILLUSTRATED BY THE PROJECTED INCREASE IN NURSING HOME COSTS FROM 24 BILLION IN 1980 TO 75 BILLION IN THE 1990'S, JUST A FEW YEARS FROM NOW.

WE MUST FIND WAYS OF PREVENTING AND ALLEVIATING THE DISABILITIES WHICH AFFLICT THE ELDERLY TO REDUCE THE IMPACT OF THESE DRAMATIC COST INCREASES. THESE DISEASES WILL NOT GO AWAY AS A RESULT OF LONG TERM CARE FACILITY CONSTRUCTION OR THE PRESENTLY AVAILABLE SOCIAL SERVICE, ESSENTIAL AS THEY MAY BE AT THIS TIME. THEY WILL ONLY MULTIPLY UNLESS BIOMEDICAL RESEARCH IS SUPPORTED AND FINDS SOME ANSWERS TO HELP IN THEIR PREVENTION AND TREATMENT. COLLECTIVELY THEY CONSTITUTE THE GREATEST HEALTH PROBLEMS OF THE PRESENT AND THE FUTURE. AGAIN, I EMPHASIZE, BASIC BIOMEDICAL AND SOUND CLINICAL RESEARCH REPRESENT THE ONLY POSSIBLE SOLUTION TO MOST OF THESE DISEASES.

MR. CHAIRMAN, AND MEMBERS OF THIS COMMITTEE, I WOULD LIKE TO SPEAK SPECIFICALLY TO SEVERAL AREAS WHERE MORE ADEQUATE FUNDING FOR AGING RESEARCH IS NEEDED. THE FOLLOWING AREAS ARE ONES THAT MUST RECEIVE ADDITIONAL SUPPORT IF WE ARE TO CONTAIN HEALTH CARE COSTS.

INVESTIGATOR-INITIATED RESEARCH: RESEARCH MUST BE SUPPORTED TO CLARIFY AT THE GENETIC, MOLECULAR, CELLULAR, AND ORGANISMAL LEVELS THE BASIS FOR THE PHYSIOLOGICAL DECLINE THAT ACCOMPANIES AGING AND RENDERS BIOLOGIC SYSTEMS INCREASINGLY LESS EFFICIENT IN NORMAL FUNCTION AND SUSCEPTIBLE TO AGE-RELATED

DISEASE PROCESSES. MOLECULAR CLONING AND GENE TRANSFER ARE DISCIPLINES THAT MAY HAVE PROFOUND INFLUENCE ON OUR FUTURE LIFE. THE NIA SHOULD ASSUME A LEADERSHIP ROLE IN THIS AREA AND THEREFORE, AN INTRAMURAL LABORATORY OF MOLECULAR GENETICS SHOULD BE SUPPORTED.

GERIATRIC MEDICINE: THE INSTITUTE CURRENTLY SUPPORTS GRANTS DESIGNED TO DEVELOP FACULTY AND CLINICAL INVESTIGATORS UNDER THEIR ACADEMIC MEDICINE AWARDS PROGRAM. WITH CURRENT SHORTAGE OF TRAINED FACULTY IN GERIATRICS, THIS PROGRAM IDEALLY SHOULD BE EXPANDED TO INCLUDE GRANTS FOR MOST OF OUR 126 MEDICAL SCHOOLS. ULTIMATELY ALL MEDICAL STUDENTS SHOULD RECEIVE TRAINING IN GERIATRIC MEDICINE. IN ORDER TO ACHIEVE THIS, A MARKED INCREASE IN TRAINED FACULTY WILL BE ESSENTIAL.

DEMENTIAS OF AGING: THE HUMAN AND HEALTH CARE COST OF SENILE DEMENTIA INCLUDING THE ALZHEIMER'S TYPE (SDAT) NECESSITATES THAT THIS BE A MAJOR PRIORITY OF THE INSTITUTE. SOME 3 TO 4 MILLION AMERICANS SUFFER FROM SOME TYPE OF DEMENTIA, AND BETWEEN 500,000 AND 1,500,000 OF THEM HAVE SENILE DEMENTIA OF THE ALZHEIMER'S TYPE, A DISEASE OF UNKNOWN ETIOLOGY CHARACTERIZED BY GLOBAL INTELLECTUAL DETERIORATION AND INABILITY TO CARRY OUT THE NORMAL TASKS OF DAILY LIVING. FOR THE PAST FOUR YEARS, THE INSTITUTE HAS PROVIDED LEADERSHIP FOR A MAJOR EXTRAMURAL INITIATIVE IN THIS AREA AND IT IS RAPIDLY ASSUMING A POSITION OF LEADERSHIP WITH THE DEVELOPMENT OF ITS LABORATORY OF NEUROSCIENCES AT THE NIH CLINICAL CENTER. THE NEW CENTERS WHICH HAVE BEEN APPROVED SHOULD BE SUPPORTED ADEQUATELY SO THAT THE RESEARCH BE INTENSIFIED.

OTHER DISEASES ASSOCIATED WITH AGING: IMPORTANT AS ALZHEIMER'S AND ALLIED DISEASES ARE, THEY SHOULD NOT COMPLETELY OVERSHADOW THE NEEDS OF OTHER CRIPPLING DISEASES ASSOCIATED WITH AGING WHEN CONSIDERATION IS GIVEN FOR FINANCIAL SUPPORT. WE SHOULD ALSO CONCENTRATE ON LOSS OF IMMUNITY WITH AGING, CRIPPLING OSTEOARTHRITIS, BLINDNESS DUE TO MACULAR DEGENERATION (THE MAJOR CAUSE OF BLINDNESS TODAY), RETINAL DEGENERATION, LOSS OF KIDNEY FUNCTION, INCONTINENCE AND OTHER DISABLING DISEASES. RECENTLY PROGRESS IS BEING MADE IN THE UNDERSTANDING AND PREVENTION OF OSTEOPOROSIS, AND HYPERTENSION, A MAJOR CAUSE OF STROKES. SYSTOLIC HYPERTENSION, A CONDITION THOUGHT TO BE RELATIVELY BENIGN COMPARED TO DIASTOLIC HYPERTENSION HAS BEEN FOUND IN RECENT

STUDIES TO ALSO HAVE A HIGH RISK OF STROKES AND DEATH. A JOINT STUDY OF THE NIA AND THE NHLBI IS BEING PLANNED TO DETERMINE THE VALIDITY OF THIS IMPORTANT FINDING AND TO DETERMINE THE BEST MEANS OF CONTROLLING IT. THIS SHOULD BE SUPPORTED TO THE DEGREE NEEDED TO ACCOMPLISH ITS AIMS.

I WOULD LIKE TO COMMEND ESPECIALLY NIA'S BALTIMORE LONGETUDINAL STUDY OF AGING (BISA). THIS IS A SPLENDED EXAMPLE OF THE IMPORTANCE OF LONG-TERM STUDIES IN THIS FIELD AND HAS RESULTED IN THE MOST EXTENSIVE DATA BASE AVAILABLE IN THE WORLD TODAY. IT HAS BEEN A SOURCE OF MUCH VALUABLE SCIENTIFIC INFORMATION RELATING TO AGING. IT SHOULD BE GIVEN FULL SUPPORT AND ENCOURAGEMENT.

IT IS ENCOURAGING TO LEARN THAT THE NURSING HOME PROGRAMS ARE BEING STARTED UP AND AS A RESULT OF THE NIA LEADERSHIP, ARE INCREASINGLY BEING DEVELOPED IN OTHER INSTITUTES. MANY OF THE CONDITIONS THAT CAUSE THE ELDERLY TO SPEND LONG PERIODS OF TIME IN LONG-TERM CARE INSTITUTIONS ARE NOT SEEN IN ACUTE CARE HOSPITALS UNTIL THE CONDITION HAS PROGRESSED TO THE POINT WHERE REHABILIATATION IS DIFFICULT OR IMPOSSIBLE. EXAMPLES INCLUDE SUCH CONDITIONS AS SENILE DEMENTIA, ADVANCED ARTHRITIS, OSTEOPOROSIS WITH MULTIPLE FRACTURES, BLINDNESS DUE TO MACULAR AND RETINAL DEGENERATION, URINARY AND FECAL INCONTINENCE, LOSS OF NEUROLOGIC CONTROL, ETC. THE CONCEPT OF A TEACHING NURSING HOME AWARD PROVIDES A SETTING FOR CLINICAL INVESTIGATION. WHILE IN THE PAST CLINICAL RESEARCH HAS USUALLY BEEN DIRECTED AT ONE DISEASE OR MECHANISM AT A TIME, THE FACT IS THAT MOST ELDERLY PATIENTS HAVE MULTIPLE DISEASES SIMULTANEOUSLY. THIS COMPLICATES, AND MAY CONFUSE THE RESULTS OF RESEARCH, ESPECIALLY THERAPEUTIC STUDIES. EXPERIENCE WITH PATIENTS IN NURSING HOMES WILL BROADEN AND BALANCE THE JUDGEMENT OF YOUNG PHYSICIANS AND INVESTIGATORS AND OTHER HEALTH CARE PERSONNEL. TRAINING CAN BE CARRIED ON IN A NURSING HOME AT A LOWER COST THAN IN AN ACUTE CARE HOSPITAL.

FINALLY, IT SHOULD BE EMPHASIZED THAT WE ARE INVOLVED HERE WITH DISEASES, EACH OF WHICH AFFLICTS LITERALLY MILLIONS OF PEOPLE. A MAJOR BREAKTHROUGH INVOLVING ANY SINGLE ONE OF THESE DISEASES CAN AFFECT THE LIVES OF A MILLION OR MORE PEOPLE IN A VERY SHORT TIME AND THE ECONOMIC SAVINGS CAN RANGE AT THE LEVEL OF HUNDREDS OF MILLIONS OF DOLLARS. MOREOVER, ONCE

ACHIEVED, THE ADVANTAGES USUALLY CONTINUE FAR INTO THE FUTURE - WITNESS POLIO, TB, RHEUMATIC HEART DISEASE, PNEUMOCOCCUS PNEUMONIA, MEASLES AND OTHER DISEASES. SURELY, THIS EFFORT IS WORTH THE EXTRA EFFORT AND INVESTMENT AND THE SERIOUS SUPPORT OF ALL OF US.

IN CONCLUSION: I URGE THAT THIS COMMITTEE AND THE CONGRESS AS A WHOLE GIVE INCREASED SUPPORT TO THE BIOMEDICAL RESEARCH AND THE TRAINING PROGRAMS OF THE NATIONAL INSTITUTE FOR AGING. AT THE SAME TIME THE IMPORTANCE OF VOLUNTARY HEALTH AGENCIES SUCH AS THE AMERICAN FEDERATION FOR AGING RESEARCH (AFAR) SHOULD BE RECOGNIZED. IT SUPPORTS BIOMEDICAL RESEARCH IN AGING AS A COLLABORATIVE EFFORT IN THE EDUCATION OF THE PUBLIC AND THE HELP OF YOUNG INVESTIGATORS.

RECENTLY WE HAVE BEEN HEARING A LOT ABOUT THE COST CUTTING OF MEDICAL CARE. COST CUTTING IN THIS SOCIAL-ECONOMIC SENSE DOES NOT REDUCE THE INCIDENCE OF DISEASE NOR THE SUFFERING FROM IT. THE LONG RANGE REDUCTION IN THE COST, BOTH ECONOMICALLY AND PHYSICALLY CAN ONLY COME FROM THE ELIMINATION OR CURE OF DISEASES. THE RESULT OF SOLID BASIC AND CLINICAL RESEARCH.

THERE IS NO OTHER WAY!

STATEMENT OF LIN NOYES, DIRECTOR, FAMILY RESPITE CENTER, FAIRFAX, VA

Senator WEICKER. Our next witness is Lin Noyes, director of the Family Respite Center, Fairfax, Va.

Ms. NOYES. Thank you, Mr. Weicker, for inviting me to appear today. I represent the Alzheimers Disease and Related Disorders Association nationally and I am also director of the Family Respite Center.

I am going to deviate from my remarks due to the time constraint and try and hit some of the major issues.

First of all, I can't agree more that we need research. We need to have those 10 centers fully funded that were put out to be funded. We don't want to see that cut.

But besides research, we have people like Senator Javits who are the living dead that need to be cared for today. Just as Senator Javits needs Scotch tape from time to time, these folks can have an improved quality of living by the kind of care they receive.

The Family Respite Center started out as more or less a babysitting service for families, and what we found out is that these people's functioning is improved when you apply the right kind of care. So that although we do need research, we also need to have some support for the respite care that benefits both the family and the patient for Alzheimer's type illnesses.

So I would recommend that the Administration on Aging be directed to work with the local chapters in relation to community-based respite centers and the National Institutes of Health continue to stress care centers related to the care of Alzheimers victims. These kinds of programs work. We need to get them out of the closet where folks can see them, and they need to be replicated all over the country. They are an alternative to institutionalization. The respite centers is a very important subject.

How is that for quick? That is it.

Senator WEICKER. That is very quick.

You were mentioned in an article, if I am not mistaken, the one Senator Javits referred to.

Ms. NOYES. He referred to the one in the Sun. This was in the Washington Post a couple weeks ago.

Senator WEICKER. This was in the Washington Post. It is a very good indication of what you do.

Ms. NOYES. I invite you to the center any time you are free to come and see how these people function. They may be the living dead, but we stress the living part. These people have a good time. They talk to one another. They can take part in activities. It is not just somebody sitting in a chair humped over waiting to die.

PREPARED STATEMENTS

Senator WEICKER. That is great. I thank you for what you are doing. Your statement will be included in the record at this point along with other statements for the record on appropriations for the National Institute on Aging.

Ms. NOYES. Thank you very much.

[The statements follow:]

STATEMENT OF LIN NOYES

Mr. Chairman and members of the Subcommittee --

My name is Lin Noyes and I am here on behalf of ADRDA, the Alzheimer's Disease and Related Disorders Association.

Actually, I find myself in a very unique position today. I am here to underscore some very broad issues surrounding this horrible disease. At the same time, I also happen to be the director of the Family Respite Center in Fairfax, where families face these issues on a day to day basis and are learning to cope with the affects of this terrible disease.

By way of background, let me just say that the Family Respite Center is one of the handful of centers nation wide to offer a break in care giving for what would otherwise be a 24-hour a day job for family care givers.

Our center, was established in July 1984 by the Northern Virginia Chapter of ADRDA, we provide day time care designed to meet the needs of families that have elected to care for their loved ones at home.

At the center, we provide:

* a day program of activities aimed at limiting the loss of physical functioning and minimizing social isolation and inactivity;

* respite care and support for family members; and,

* an alternative to institutionalization.

To that I would add that the services we offer differ from those provided by adult day care centers and senior centers, in that we tailor our program to the specific needs of each participant and participants feel more at ease among those with similar disabilities.

Daily activities include: physical exercise and skill maintenance, counseling, improving communication, and socialization with peers.

Mr. Chairman, for me to sit here and speak of the desperate needs of Alzheimer's families -- for respite care, for day care, or for medical and financial help -- would be like preaching to the choir. Because for the past several years this Subcommittee has played an important leadership role in this area.

Which brings me to one of the reasons why I am here today -- to thank each of you for the compassion, foresight, and support this Subcommittee has lent to the fight to conquer Alzheimer's disease.

This Subcommttee drew the first line of battle in the area of medical research where, until just a few years ago, the National Institutes of Health were spending less than four million dollars to investigate this disorder. This year, as a result of your efforts, NIH will dedicate more than 50 million dollars to research into finding a cure or treatment for Alzheimer's.

More importantly, the investment has begun to pay off. For one thing, by making additional funds available you have stimulated new scientific interest in a disease that medicine has known about for three-quarters of a century. I point that out because I realize that in a tight budget year such as this, some might question the need to increase research funding. Given the fact that more than 2.5 million people now suffer from Alzheimer's -- at a cost of more than 30 billion a year -- I think you will agree that this investment is not only good social policy, but good economic policy as well.

Which leads me to the second point.

Last year, this Subcommittee called attention to the fact that Alzheimer's disease, because it runs such a prolonged course, can bring families to their knees -- physically, emotionally, and financially.

To help prevent that from happening, you encouraged the Department of Health and Human Services to focus on the special needs of Alzheimer's families, and to work with communities to help establish high quality, cost-effective respite care programs.

Recommendations

To conclude, Mr. Chairman, we are asking that you consider three recommendations:

First, that the current research momentum be maintained and that the ten Alzheimer's research centers you established be fully-funded, at one million dollars each.

Second, that the Administration on Aging be directed to work with the local ADRA Chapter in the creation of community-based respite centers.

Third, that the National Institute of Mental Health continue to focus on the family stress problems related to the care of Alzheimer's victims.

Thank you for your support, Mr. Chairman. You have given all of us reason to hope.

STATEMENT OF DR. ROBERT BUTLER, BROOKDALE PROFESSOR OF GERIATRICS AND ADULT DEVELOPMENT AND CHAIRMAN, GERALD AND MAY ELLEN RITTER DEPARTMENT OF ADULT DEVELOPMENT

Mr. Chairman, I very much appreciate the opportunity to once again testify before the Committee in support of the programs and activities of the National Institute on Aging (NIA). As the first Director of the Institute and now the Brookdale Professor of Geriatrics and Adult Development and Chairman of the Gerald and May Ellen Ritter Department of Adult Development at Mr. Sinai School of Medicine, I have a unique perspective of the impact the NIA has had on the growth of aging research within the United States. Since 1975, when it began with a total budget of less than $16 million, it has become an important influence on much of the aging research and research training being carried out within the universities and research institutions of the country. It has called attention to the diseases and conditions that sometimes uniquely affect the elderly and the conditions of older life which negatively impact upon the lifestyles and the quality of life of these individuals. Through its research programs, it has provided recognition that many of these health problems which previously had been considered a consequence of growing old are, in reality, disease states which have a potential for treatment and cure. And, finally, it has promoted the idea that any improvement in the quality of life not only directly benefits the elderly individual but also reduces the health care costs of our elderly population.

Although the overall budget for the NIA has increased over the last ten years, still a relatively small amount is being invested in this area of research, particularly when related to the costs of health care attributable to our over-65 population. These health care costs are estimated to be about $110 billion. The FY 1985 budget at the appropriations level of $144 million amounts to just one-tenth of one percent of these costs. Surely the United States can afford a larger contribution to this effort which will potentially lead to not only an improvement in the health status of these individuals but also to a reduction in their rapidly-increasing health care costs, a portion of which is covered through medicare.

In order for the NIA to continue its progress in improving the health status of our elderly population, it is necessary that increased staffing and dollars be provided. Between FY 1984 and FY 1986 (as proposed in the 1986 President's budget), the NIA will lose a total of 27 FTE's. The proposed 1986 budget is almost $10 million less than the amount appropriated in 1985. Surely this is heading in the wrong direction at the wrong time. With these reductions, it is impossible for the NIA to effectively conduct and support research in many high-priority areas at appropriate levels. There are a number of promising areas which are ripe for exploitation that will not be supported at adequate levels under the proposed budget. For example, research on Alzheimer disease, which affects between 1.5 to 2.5 million older people in this country, has progressed rapidly under the direction of the Institute in the last ten years. There are a number of excellent theories related to the diagnosis, treatment, and prevention of this affliction which beg for further exploration. Some of the best investigators in the country have been attracted to research in this field, but only a relatively small number can be supported. Recent advances in molecular genetics technology can be applied to aging research--specifically, Alzheimer disease and osteoarthritis. Research on the "oldest old" (those aged 85 and older) would increase our knowledge on physiologic and pathophysiologic changes in this group, their level of functional dependency, and ways to maintain their health and effective functioning. Currently there is an 8-year differential between the life expectancy of men and women. This difference has been increasing rapidly and will continue to do so to the point that by the turn of the century there will be approximately 150 women to every 100 men aged 65 and over. This differential has importance related to the quality of life of older people of both sexes and their ability to function independently.

The reduction in FTE's clearly must impact on the effective administration of extramural grants and contracts programs and the Institute's ability to mount new or expand old initiatives in important areas. For example, new activities in Alzheimer disease, particularly the Alzheimer Disease Research Centers Program which was initiated in 1984, and new training programs designed to increase trained investigators and faculty in the areas of geriatrics and gerontology, have been carried out in the face of reduced FTE's to the detriment of other important activities. In the intramural program, a new molecular genetics laboratory will be only minimally staffed because of the unavailability of personnel resources. The Baltimore Longitudinal Study on Aging, which included a female cohort for the first time in 1978, has not been able to add women at appropriate levels. The Epidemiology, Demography, and Biometry Program, which initiated a number of large-scale population studies several years ago and which are now producing valuable data on elderly subjects under study, cannot adequately analyze these data. These important studies and others must not be slowed based on the mistaken notion that the provision of adequate resources will add to the national debt--the investment of these resources will in the long term benefit the Nation by reducing the national debt. Biomedical research is a cost-effective way of impacting on the rapidly-spiraling health care costs. It has been estimated that every dollar invested in such research returns at least ten dollars.

Mr. Chairman, in order for the National Institute on Aging to maintain the momentum generated during the first ten years of its existence and to benefit not only the large numbers of its elderly citizens but also their families, friends, and society, it is important that adequate resources be provided. This important work cannot be performed without an appropriate level of personnel and funds. The investment is small, but the impact could be dramatic. It is my judgment that in order for the Institute to carry out its mandate at a level which meets the potential of the research community, its budget should be increased by approximately $35 million over the President's budget to a level of $170 million and the FTE's increased by 50 to a new level of 401. Of these funds, $10 million would bring the FY 1986 budget to the same level as in FY 1985; $10 million could effectively be added to the Alzheimer disease program (including $5 million for up to five new Alzheimer Disease Research Centers); the Institute's investment in molecular genetics research and research on the oldest old could be doubled by adding $2 million to each; $1 million added to the Baltimore Longitudinal Study on Aging would allow the number of women in the Study to be increased to a level commensurate with that of the men; an additional $2½ million allocated to the area of health and effective functioning would support increased research on nutrition, exercise, cognitive functioning, and behavioral geriatrics; $3½ million would allow for expansion in the areas of osteoarthritis, incontinence, osteoporosis, infectious diseases, and cardiovascular diseases; research on gender differences could be increased by $1 million; and training and career development activities by $3 million. The additional FTE's would be used to increase the staff required to administer the expansion of activities in the extramural program and to provide for the necessary intramural staff to carry out inhouse investigations.

Thank you very much for this opportunity to provide my thoughts regarding the National Institute on Aging.

[From the Washington Post, Apr. 12, 1985]

THE HIGH COST OF ALZHEIMER'S

Several years ago, my mother's cousin, Dottie, learned that she had Alzheimer's disease—the degenerative, incurable brain illness that afflicts an estimated 2 million older Americans. Both Dottie and her husband, Bud, were in their upper eighties and Bud cared for her until she became helpless and needed nursing home care.

In his final letter to my parents, Bud expalined the financial devastation that can be wrought by this disease: "Medicare," he wrote, "pays for 100 days in a nursing home for each calendar year when the ailment is responsive to such care. Alzheimer's is not responsive to any known care or treatment and therefore not covered."

He enclosed a copy of a typical bill from the nursing home: The daily rate for care was $69 and with fees for laundry, equipment rental, medical supplies and so forth, the monthly bill came to $2,248.75, or close to $27,000 a year. He wrote: "Had plenty of time to prepare for this financially and am very grateful that barring unforeseen happenings have enough to see her through with the best of care.

"Dot was 90 last August. I will be 89 this year and have so very much to be thankful for that I do not have time to worry. Swim every day, weather permitting. Thank you again for your thoughts, concern and check. Dottie is slowly slipping away."

Two weeks ago, Dottie died at the nursing home. Bud was found dead in their home the following day.

I am sharing this story because Alzheimer's disease will affect a great many of us, directly and indirectly, as the baby boom generation ages. Alzheimer's has been estimated to be the fourth or fifth most frequent cause of death in the United States.

The disease begins with memory loss and confusion and, over the years, while the body remains intact, the brain deteriorates and the victim becomes totally dependent on others. They have to be watched—guarded—constantly, which takes an enormous toll on their families. Experts have estimated that by 1990 it could cost $30 billion a year to institutionalize Alzheimer's victims and those with related impairments.

The cost of care is borne by the patients' families until their resources are so depleted that they are eligible for Medicaid. Under the present ystem, those who paid a lifetime of taxes and insurance premiums are ineligible for any help in paying medical costs until they are paupers. As presently funded, however, the Medicare system could not bear the cost of long-term care for Alzheimer's patients.

The Family Respite Center, currently set up in Paul the VI Catholic High School in Fairfax City, is one of about 20 centers across the country that offers an alternative to nursing home care and gives familes a break from constant caretaking. The center grew out of a support group that was started in 1982 by two women who had relatives with Alzheimer's.

One of them, Lin E. Noyes, directs the respite center, which opened last September after a long search for suitable space. It now serves about 25 families and cares for eight patients a day. They are charged $22.80 a day, roughly one-third of nursing home fees. With 18 patients, the center would be self-sustaining, she says, although now it is being helped by two foundations and the Mount Vernon Knights of Columbus.

"It's a substantial savings to the family," says Noyes, "although someone still has to watch them in the evening." The patients' days are filled with a variety of activities ranging from excercises to films and crafts. Lunch is provided by meals on Wheels. "Some families are able to work because their parents or spouse are in the center," says Noyes. "Other families use their time to do grocery shopping, socialize or relax."

Patients need skillful handling, she says, but not highly trained medical personnel. "We've only had four people leave our center. One went into a nursing home, the other three have died. So we have kept them until the end of their life span."

The Virginia Journal papers recently reported that the Fairfax Respite Center won't be able to use the school after June 15 because the space is needed for students. Efforts to find space in other schools or churches in northern Virginia have been unsuccessful so far, says Noyes.

These kinds of centers are sensible, humane and cost-effective alternatives to nursing homes, to the financial and emotional burden now placed on families, and ultimately, on society. That the Fairfax Respite Center is struggling to find space speaks volumes about society's short-sighted approach to a long-range, devastating problem.

DIVISION OF RESEARCH RESOURCES

STATEMENT OF JOHN E. McARDLE, PH.D., DIRECTOR OF LABORATORY ANIMAL WELFARE, THE HUMANE SOCIETY OF THE UNITED STATES

Senator WEICKER. Next we come to that portion which relates to research resources. Dr. John E. McArdle, director of Laboratory Animal Welfare, the Humane Society of the United States.

Mr. MCARDLE. Mr. Chairman, in the interest of starting a tradition of brevity, I will make my remarks very quick.

We have three major areas of concern. I realize that the committee is very concerned about trying to find sufficient funds for medical research needs and distributing those funds, and we share that concern. Where animals are involved in that process, we are concerned about their humane treatment.

Up to fairly recently the only indication we have had of problems was in basic husbandry and care. Last year the University of Pennsylvania videotapes were taken which documented the use of animals. One of our concerns is this particular laboratory not receive funding until an investigation has been completed and some sort of assurances have been put together that the things documented on tape will not be repeated.

The second concern, and traditionally one we have talked to you about, is funding for regional primate research centers. Over the past 10 years, if you look at the total core support and the grants that have gone to those facilities, they have consumed several hundred million dollars. We believe it is time for the General Accounting Office to do a study of that program to see if in fact the American public is getting value for the dollars being spent. We believe the money is disproportionately being given to them. There are others that have greater need.

Our third area of concern is our constituents are actually very much concerned about the use of pets in biomedical research. We are still looking for a way to solve that.

PREPARED STATEMENT

Senator WEICKER. You have a statement. That will be included in its entirety in the record. I thank you for your consideration. Thank you for your testimony, too.

Mr. MCARDLE. Thank you.

[The statement follows:]

STATEMENT OF JOHN E. MCARDLE

MR. CHAIRMAN, I am Dr. John McArdle, Director of Laboratory Animal Welfare for The Humane Society of the United States and a research scientist with over eight years experience using nonhuman primates and other laboratory animals in biomedical research. I am pleased to have this opportunity to speak to you on behalf of The HSUS and our more than 350,00 constituents. I have three specific proposals to present to this committee.

PROPOSAL 1: Restrictions on Continued Federal Funding for the Head Injury Clinical Research Center of the University of Pennsylvania.

It is now well established that both the physical and psychological environment to which laboratory animals are exposed has a major influence on their individual physiology and behavior. The relevant variables include, but are not limited to, cage size, food bedding, water, crowding, noise, light, handling. Essentially everything that happens to the animals while being raised, transported, and housed or experimented on at any research facility has a real or potential influence on the validity of resulting experimental data.

It is equally obvious that if these experimental animals are subjected to either passive or active abuse and neglect, the results of such taxpayer supported projects would also be invalid.

Although the animal welfare movement has always questioned the extent to which the research community properly cares for their laboratory animals, we have seldom had direct, well-documented evidence of gross neglect and abuse during the actual experiments. Such evidence is now available.

In August of 1984, more than 60 hours of videotaped experiments were removed from the Head Injury Clinical Research Center of the University of Pennsylvania. These tapes document an appalling lack of sensitivity and humaneness on the part of the research personnel, as well as actual abuse of the animals.

At present the following activities are in progress:

1. The National Institutes of Health is investigating the laboratory for violations of its animal care guidelines.

2. The Animal and Plant Health Inspection Service (APHIS) of the USDA is examining the entire set of tapes as part of its investigation of possible repeated and flagrant violations of the Animal Welfare Act. Earlier APHIS inspection reports also identified numerous deficiencies in this laboratory.

In view of: (1) the necessity of proper care of laboratory animals, in order to provide valid research results; (2) the millions of taxpayer dollars consumed by this particular laboratory; (3) the evidence of abuse and neglect to the research animals; and (4) the multiple investigations now in progress, we are requesting that the committee indicate to the National Institutes of Health that no grant proposals from the Head Injury Laboratory at the University of Pennsylvania be funded until the investigations have been completed and verifiable assurances are given that the neglect and abuse has stopped.

PROPOSAL 2: General Accounting Office analysis of the Research and Husbandry Programs of the Regional Primates Research Centers.

Rather than continuing to routinely increase and continue funding for the seven Regional Primate Research Centers (RPRCs), we believe a detailed study by the General Accounting Office (GAO) is long overdue. Such an analysis would, we believe, confirm our contention tha the PRCs are characterized by poor quality research, inadequate care of their animals and a tragic waste of already scarce biomedical research funds.

The GAO recently completed a comprehensive review of the APHIS program for the enforcement of the Animal Welfare Act. They documented repeated failures to perform their duties as mandated by law, inadequately trained and motivated personnel and waste of appropriated funds. In the last five years, APHIS has received less than $24 million dollars. The RPRCs, however, received more than that alone for FY85. It is our contention that the problems with the RPRCs are of a similar kind to those associated with APHIS, but the amount of taxpayers money involved is substantially greater.

Although primates represent only a small fraction of the animals used in biomedical research, the Animal Resources Program of the Division of Research Resources spends the majority of its budget on core support for the handful of scientists at the RPRCs. These researchers have an unfair competitive advantage over their colleagues in academia, since both salary and maintenance of physical facilities are guaranteed. Without the controls provided by merit-based competition, inferior personnel and research can be sheltered from the usual mechanisms for dealing with poor quality science.

The RPRCs were established to "ensure that the special environments required for biomedical studies with primates are available to U.S. scientists". They were designed to serve as national resources for the U.S. biomedical research community, but they have consistently failed to achieve that goal. A British government study in 1969 was the first to note that the RPRCs' visiting scientist programs were "surprisingly small" and "do not provide a service outside their own organization." They summarized the RPRC program by noting "the quality and quantity of work emerging from the NIH sponsored programs does not appear to justify the great expense incurred" and that a similar RPRC program in England "would not be in the best interest of the majority as it would tend to attract available funds to the minority."

Additional DRR commissioned reviews of the RPRC program in 1976 and 1979 noted that these observations were still appropriate. In fact, the situation had actually deteriorated with regard to the quality of the research programs and the care of laboratory animals. Our ongoing, comprehensive examination of the RPRC annual reports since 1979 clearly shows no improvement in research programs or animal husbandry.

The RPRCs are still proposing and conducting research that duplicates work being done elsewhere or already known, projects for which viable alternatives are available, projects which use inappropriate animal models or projects which serve no useful intellectual or scientific purpose. For over twenty years the RPRCs have failed to perform as originally intended. Several hundred million dollars have been wasted supporting such cruel and scientifically unjustifiable projects as toxicity testing of substances already in long-term use or previously banned substances (ignoring the clinical data), and an unending series of permutations of experimental psychology protocols. RPRCs are still removing increasingly endangered primates from their natural habitats, despite over two decades of "research" into proper breeding and care of primates in captivity. Much of the research into reproductive biology done at the RPRCs is HSUS designated to compensate for the grossly inadequate conditions under which the animals are kept. One only need visit the .

world's leading zoological parks to learn how to breed and maintain primates.

For the reasons cited above, we are requesting the committee's assistance in asking for a comprehensive evaluation of the RPRC program by the General Accounting Office.

PROPOSAL 3: Protecting Pets from Use in Biomedical Research and Education.

Last year we requested this committee to include an amendment to the NIH authorization bill, specifically stating that no federal money could be used for the purchase or use of any cat or dog acquired directly or indirectly from a municipal or private shelter (i.e., to stop pound seizure). We are still seeking such an amendment, as the only possible mechanism to prevent people's pets from being used in biomedical research. In addition, we see the theft of pets for use in biomedical research and the problems with Class B animal dealers as directly correlated with the continuation of pound seizure. The continued use of random-source animals, such as those from pounds and shelters in research, testing, and education encourages and continues the theft of pets. Theft of dogs and cats (directly or by fraud) for sale to research is increasing nationwide, having reached epidemic proportions in some areas. It is just as common in states that require pound seizure as in those that prohibit it.

The research community is aware that pets are used in research. Dr. Robert Schiable, Indiana University Medical School, recently stated that, "medical people have to publicize the value and need for using pets in research." Dr. Kenneth Larsen, University of Utah School of Medicine recently stated, in print, that pound animals are preferable for reasons of economy, convenience and because they are accustomed to human handling (i.e., they are cheap, available and pets). With regard to pet thefts, the researchers are responsible for and associated with this illegal activity by creating and maintaining the demand for these animals and, therefore, a system that encourages theft of pets.

We have documented the dealers (bunchers) and representatives of research institutions, when they come to the pounds and shelters. They do not select the sick, injured, aggressive, maladjusted, feral dogs and cats. They take the friendly, healthy, socialized, trusting animals. Precisely those animals that are guaranteed to be pets are the most likely to be lost and waiting to be re-united with their family or adopted by a new family.

Consider Henry Knudsen, a Class B dealer in Lathrop, California. He sold to almost every research institution in California. On November 1, 1984, police went to his kennel, where they found more than one hundred starving or dead cats and dogs (18 dogs and 18 cats dead). Cages and runs were covered in feces, animals forced to canabalize each other, although food was available in a nearby shed. Where did he get his animals? Most came from pounds. Some were stolen. Others were acquired from Oregon and Washington, by fradulent responses to "free to good home" ads. There were definitely pets.

The Mayo Clinic has 100 full-time researchers and 800 reserve personnel. It has received $49 million in NIH grants. In early January, 1984, 18 dogs were stolen and sold to USDA dealer Donald Hippart of Kasson, Minnesota (dealer and operator of the local pound). Fifteen of these dogs were recovered by their owners from the Mayo Clinic and 2 from the University of Minnesota. When found, the dogs were severly dehydrated, had major weight loss, kennel cough, and a variety of other ills.

We are now convinced that the only viable, guaranteed means to stop the theft and use of pets in research, is to ban the use of such random-source animals. It is time to return the pounds and shelters to their proper status as santuaries which address the serious problems of responsible pet ownership, pet protection and animal control. We are again seeking your assistance in accomplishing that goal.

STATEMENT OF ALEX PACHECO, CHAIRPERSON, PEOPLE FOR THE ETHICAL TREATMENT OF ANIMALS

Senator WEICKER. Next is Alex Pacheco, chairperson, People for the Ethical Treatment of Animals.

Mr. PACHECO. Good afternoon, Mr. Chairman.

Senator WEICKER. Good afternoon.

Mr. PACHECO. I think some of the things people said to you earlier today are very pertinent to what I wanted to bring up.

Regarding the Alzheimers disease problem, it is very clear that there are a lot of human victims and human patients that need help. The New York Times paper this morning describes how there is a lot of research going on, but the research doesn't seem to really be benefiting the human victim and the patients that need the help. So that is what I wanted to talk about here is I wanted to talk to you about scientific fraud, about unjustifiable and extreme suffering that is inflicted upon animals, and violations of State law and violations of Federal law.

Where is this going on? At this point there is a laboratory where it is being done whose funding originated in Congress. It is an ivy league institute, the University of Pennsylvania. This facility was found to have not 20, not 40, not 50, not 60, but over 70 violations of Federal law, the Federal Animal Welfare Act, which sets the bare minimum standards that are required for the care and use of animals.

It is a laboratory in which experimenters smoke cigarettes while they perform surgery on animals. It is a laboratory where, in violation of Federal law, experimenters perform extremely painful head surgery on an animal they have to hold down on the table because the animal is trying to lift its head and is not properly anesthetized. It is a laboratory which has passed all of the NIH inspections for the last 13 years and has been funded by the NIH for the last 13 years, but which the USDA inspections found cockroaches were everywhere. Almost needed 100 percent better sanitation. In fact, the USDA found other violations that were so severe they ordered all of the animals be moved out immediately.

This is the Head Injury Laboratory of the University of Pennsylvania, which is given approximately $1 million every year. This laboratory, despite all of this, has been described by the Director of NIH as one of the best laboratories in the world.

Now, scientific fraud. This laboratory's claim to fame is a machine that took the experimenters over 10 years to develop. It is the only one of its kind. What is so unique about this device is it delivers precise and exact brain damage. The animal's head is cemented into a helmet and the helmet is bolted onto a modified hydraulic jack. A switch is thrown and the hydraulic jack thrusts the animal's head at a very high speed. The animal's brain is essentially scrambled inside the skull without ever cracking the skull. The animal is not anesthetized and is conscious during this procedure, and afterward. Some animals are damaged and have this inflicted upon them five or six times over a period of 7 months.

At a point later in the experiment the animals have their brains frozen while the animal is alive and then they are beheaded. There is never any mention of anesthesia given to these animals.

Now, the device can deliver anything from a mild coma to instant death. The key thing about this device is that supposedly it inflicts these injuries without any unknown or foreign variables. But with over 13 years of lucrative million-dollar grant applications in research protocols and over 13 years of published scientific reports, it has never once been revealed how the helmets are removed from the heads of brain-damaged animals. Now these videotapes that were taken by the experimenters themselves, which were never meant for public viewing, finally reveal how those helmets are removed. They are removed by hitting the freshly brain-damaged animal's head with repeated and sharp blows with a hammer and screwdriver.

Dr. Jay Glass, a neurophysiologist who has conducted brain research on animals for every 10 years, states,

> I cannot imagine that anyone could observe this sequence of events and still contend that these experiments have any experimental validity.

Dr. Glass goes on to say,

> The justification for the use of animals in research is that the results of this research will have value in helping develop new therapies for human patients. Having spent more than 10 years performing such research on animals, I subscribe to this view. However, I do not subscribe to the inducement of unnecessary pain and suffering on animals, nor do I subscribe to research with no or only very limited value to developing new therapeutic treatments for humans.

In the case of the head injury work, the methods shown on the videotapes make it clear the animals were subjected to unnecessary pain, that the experimental protocol followed in the work invalidated the results, and that perhaps of most concern is nowhere in the original grant application is there anything other than casual lip service given to the value of this work for treating human patients.

It has been my experience from reviewing papers for scholarly journals as well as reviewing grant applications for funding by both private and Federal agencies that when such omissions occur, it is because there are not direct grant applications nor any foreseeable future applications to this research for the benefit of this disease.

This research, to the tune of $1 million a year, is currently being funded now and the experiments are taking place now at the University of Pennsylvania, despite all of the violations of scientific norm and Federal law that have been documented.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony. It will be included in the record in its entirety. I will ask the staff to take the materials that you give to us and examine them and report back to me.

Mr. PACHECO. Thank you very much. Anybody who sees this tape, it is taped by themselves, they will be shocked and devastated by what they see.

Senator WEICKER. Staff will take the material and report to me. Thank you very much.

Mr. PACHECO. Thank you.

[The statement follows:]

STATEMENT OF ALEX PACHECO

Over the past decade, more than ten million dollars have been spent supporting cruel and possibly fraudulent head injury experiments on unanesthetized baboons at the University of Pennsylvania Head Injury Clinical Research Center (HICRC). These experiments have been objected to by People for the Ethical Treatment of Animals (PETA) and many others as a result of overwhelming evidence indicating inhumane treatment of animals, violations of federal laws and guidelines, and questionable scientific practices. The response to these allegations by the University and the National Institutes of Health (NIH) raise serious questions about the integrity and credibility of these institutions. The following is only a small sample of omissions and misrepresentations by the NIH and/or the University of Pennsylvania regarding allegations of abuses at the HICRC.

On May 2, 1985 the University claimed that the Head Injury experiments had been reviewed by the NIH, the American Physiological Society, the University of Pennsylvania's Animal Care Committee, and the University of Glasgow, and that all four entities had concluded that no wrongdoing had occurred and that the work had been conducted in compliance with all applicable standards and guidelines. These findings had been issued despite all evidence to the contrary, including a USDA report which cites the facilty with more than 74 violations of the minimum standards set by the Animal Welfare Act, and even more serious violations shown clearly on the laboratory's own video tapes.

In a letter to PETA's legal counsel from NINCDS, John Dalton, Director of the Extramural Activities Program, states that "There is no official NIH position concerning the claims that the conduct of the research affects the validity of the experimental data. We view this as a scientific question, and expect to rely on the advice of outside peer scientists for scientific merit assessment, as we do for all research grant applications." One must ask if this is the same process by which the original grant was approved. In reviewing the "scientific merit" of previous grants some of the most fundamental questions regarding the scientific validity of the research were not raised. For example, why did the NIH HICRC review committee approve the HICRC grant application which fails to mention 1) whether or not sufficient, if any, anesthesia was administered to the primates during injury; 2) whether or not sufficient, if any, anesthesia was administered when the animals' intact brains were frozen with liquid nitrogen; 3) what method was employed to remove the head of the animals from the injury apparatus; and 4) what method was used to behead the animals and whether or not sufficient, if any, anesthesia was provided during such procedures. The answers to these neglected questions can certainly be of great importance to the assessment of scientific merit, and the omission of such information reflects poorly on the accuracy and competence of the scientific review process and brings into question the integrity of the NIH peer review system.

The NIH's Dr. William Raub, Deputy Director for Extramural Research and Training, states that reviewers are "appraised fully and accurately of any issue associated with the ongoing grant" (2/14/85 letter from Dr. Raub to PETA's counsel Gary Francione). However, Dr. Dalton, in his capacity as Director of the Extramural Activities Program of the institute conducting the scientific assessment, writes in response to Mr. Francione's question as to whether the NIH site visit team members were aware of the allegations of abuse and possible scientific fraud being made against the HICRC, that he, Dr. Dalton, "expect(s)" the site visit team members will be "knowledgeable about the situation because of coverage in the public press."

Dr. Dalton further states "It is general NIH policy that scientific merit assessment be as fair and impartial as we can possibly make it." However, he also writes "we consider it inappropriate for anyone other than the applicant investigators [i.e. Drs. Langfitt and Gennarelli] and authorized officials of the applicant institution [i.e. the HICRC] to attempt to have direct communication with the visitors." One cannot help but perceive this as an effort to prevent the reviewers from communicating with anyone except those parties with deeply vested interests in the outcome of the review. This inherent bias does not facilitate a fair and accurate review. Furthermore, the NIH destroyed all hand written notes and other documents from the site visit, with nothing remaining except the final, polished report. This report, in the NIH tradition, is also being kept secret. While a copy of this report has been obtained through the Freedom of Information Act, well over 60% has been deleted. How can the American taxpayer possibly know whether the NIH is conducting fair and proper reviews, given the destruction and withholding of information?

In virtually all correspondence from the NIH to Members of Congress and the public, the NIH has continually misrepresented their position and PETA's position regarding the investigation. The NIH has stated that "the NIH takes seriously its role in developing and promoting compliance with appropriate standards for the care and use of laboratory animals in the research it supports." The credibility of such statements is dismissable when one realizes that the NIH has made no serious effort whatsoever to view the evidence on the video tapes, and that the NIH ceased communication with PETA, which has copies of the tapes, on November 15, 1984. In a letter of that date, NIH's Dr. Sandler stated that "further inquiry into this matter at this time is not warranted."

The NIH has repeatedly issued statements claiming that PETA has been "uncooperative" and that PETA refused to provide a complete copy of the tapes to the NIH. This is absolutely false. On June 4, 1984 PETA invited HHS Secretary Margaret Heckler, and any appointed investigators, to view and examine all of the tapes at their convenience. In addition, on November 13, 1984, PETA offered to turn over a copy of all the tapes to the HHS/NIH if they would agree to appoint a third party monitor acceptable to both parties to ensure a verifiably fair investigation. Finally, on April 4, 1985, PETA offered NIH a complete copy of the tapes without conditions. All that was requested was a response to the concerns PETA had and still has about the integrity of the NIH investigation. Despite these reasonable offers, which have been consistently ignored, Dr. Charles McCarthy, Director of NIH's Office for Protection from Research Risks, publicly accused PETA of "one-sided intransigence" and again insisted that PETA has "denied NIH access to the tapes" (May 3, 1985, at the NIH/USC Regional Workshop).

In a May 7, 1985, letter to Senator Lowell Weicker, President Sheldon Hackney of the University of Pennsylvania discusses PETA's alleged "unwillingness" to make the tapes available. Once again, the record clearly shows that the University has consistently ignored PETA's attempts to discuss disposition of all the tapes.

In sharp contrast to the inaction by the NIH and the University, the USDA has been quite open and responsive and unlike the NIH and the University, the USDA is not hiding documents. In response to their openness and willingness to declare violations of Federal law when they see them (as evidenced by their June 5/6, 1984, inspection of the HICRC) PETA has turned over copies of all the tapes to the USDA, which, in turn and with PETA's agreement, is making them available to the NIH.

Further misleading statements issued by the NIH and the NIH funded facility which cast doubt on the truth of any statements issued by the NIH and the University include 1) the state of consciousness of the baboons during and after the infliction of severe brain damage (the NIH and the University have stated that the animals are anesthetized while the laboratory's own grant applications, published scientific result reports, and video tapes reveal that the animals were not anesthetized); 2) the method of removal of the animal's head from the injury apparatus (the NIH and the University have never revealed how the helmets are removed. The use of repeated blows from a hammer and chisel was only revealed after the video tapes were removed from the laboratory); and 3) the validity of the experimental results

(The NIH and the University say the results of the research are valuable and provide direct benefits -- the standard defense of any and all experiments-- while one of the laboratory's Scottish colleagues has stated that the results are largely academic) (See Testimony submitted by PETA, April 26, 1985).

Given such blatant public misrepresentations, it is clear that the NIH review process, on which the public must rely, is seriously flawed. Furthermore, the University's claims can be viewed as nothing short of subterfuge considering the administration's constant refusal to release documents important to the resolution of this matter, e.g. the minutes of meetings of the University's Animal Care Committee, which contain discussion of the care of the head injured animals. The University and the NIH have both refused to release the University's written "assurance of compliance" to the NIH Guide. University of Pennsylvania's Professor of Law, Alan Watson, echoes the feelings of concerned citizens in writing "I with many others in this University, feel very strongly that what went on in Dr. Gennarelli's laboratory gives rise for serious concerns. The attempts by the Administration here to prevent open discussion and to obstruct knowledge of the truth will bring the University of Pennsylvania into disrepute."

STATEMENT OF CHRISTINE STEVENS, SECRETARY, SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

PREPARED STATEMENT

Senator WEICKER. Next is Christine Stevens, secretary of the Society for Animal Protective Legislation.

Ms. STEVENS. I am glad to be here, Mr. Chairman. Thank you.

I will submit my statement and highlight it, if I may.

Senator WEICKER. Go right ahead.

[The statement follows:]

STATEMENT OF CHRISTINE STEVENS

Last year testimony submitted for the Society for Animal Protective Legislation was composed largely of quotations from the U.S. Department of Agriculture veterinary inspectors' reports on a number of well-known research facilities throughout the nation. Since that time, over 200 institutions have been surveyed utilizing the Freedom of Information Act to obtain findings on how laboratory animals are treated in research facilities registered under the Animal Welfare Act.

It is with dismay and regret that I must report corroboration of our initial findings in the more extensive study. The minimum standards of the Act are being flouted again and again, yet National Institutes of Health (NIH) funds flow freely to institutions where multiple "deficiencies" or "alleged violations" make the lives of animals miserable and destroy the credibility of research results.

Even when a laboratory is under investigation by USDA for law enforcement purposes, NIH funding continues. A glaring example is the Head Injury Clinical Research Center of the University of Pennsylvania which has received close to a million dollars a year for the past several years, video tapes taken by members of the numerous "team" that joined in the strangely festive atmosphere which prevailed from time to time in the admittedly filthy laboratory, demonstrate a variety of abuses which the average citizen would never condone.

The public, nevertheless, is compelled to foot the bill, with no say on what is done with our tax funds or what sufferings animals undergo under the generalized concept of scientific advancement.

At the present time USDA's Veterinary Services is reviewing 20 hours of the University of Pennsylvania videotape to ascertain what violations of the federal Animal Welfare Act may be documented by it. NIH's Office of Protection from Research Risks has, in theory at least, been investigating charges that its grantees repeatedly contravened the "Guide on the Care and Use of Experimental Animals," but its ivory tower approach has, thus far, prevented it from laying eyes on the 60-hour long videotape a copy of which it could have viewed months ago had it been willing to involve an unbiased third party in the examination of the incriminating evidence.

Equally unwilling to look at the tapes are the responsible officials at the University of Pennsylvania. Though we've been brought up to believe that scientists are eager to review the evidence and learn the truth, these men avert their eyes from the unpleasant facts and, instead, level charges that the tapes have been tampered with although they offer no evidence to back up their allegations.

Mr. Chairman, this is a shameful case of arrogant bluff which the Congress should not tolerate. It should carefully examine any possible conflicts of interest. The curious behavior of NIH in this case is harmful to the entire research enterprise in the United States. It brings into sharp focus our failure to give responsible consideration to the animals upon whom, according to every NIH spokesman, the advancement of biomedical research inexorably depends. It demonstrates how severely money has pushed its way into an area where all of us wish, and most of us still believe, that idealism rules. Paul de Kruif's "Microbe Hunters" still haunt our dreams--our hopes for perfect health.

Animal experiments have brought many health benefits. Only a fanatic would deny this obvious fact. But Albert Schweitzer gave wise advice when he said,

> "Those who experiment upon animals by surgery and drugs, or inoculate them with diseases in order to be able to help mankind by the results obtained, should never quiet their consciences with the conviction that their cruel action may in general have a worthy purpose. In every single instance they must consider whether it is really necessary to demand of an animal this sacrifice for men. And they must take anxious care that the pain be mitigated as far as possible."

Some years ago, my father, Chairman of the Department of Physiology at the University of Michigan Medical School, who himself carried out experiments on animals of an entirely painless nature, showed me a cartoon entitled "Doctor, your halo is slipping." That halo is continuing to slip ever more seriously. It is clear that the Legislative Branch must step in and exercise it authority over an agency which lacks the energy and dedication to exert needed moral influence on its grantees.

This is not an easy task. Certainly not a pleasant one. But it must be accomplished if our country's reputation in the field of biomedical research is to remain untarnished. Here are the facts: The basement laboratory run by Thomas Gennarelli was invaded by members of the Animal Liberation Front an organization which seeks to discredit animal experimentation. ALF opposes all use of animals. I emphasize this point to distinguish the ALF philosophy from that of groups such as the Society for Animal Protective Legislation which seek reform, not abolition. ALF stole videotapes made by the Gennarelli group and gave a copy to the People for the Ethical Treatment of Animals which produced 25 minutes of excerpts from this visual record of the experimental head trauma inflicted on young baboons.

This portion of the tapes has been widely viewed, some of it on television in various parts of the country. Scientists with whom I have looked at it have been appalled. A primatologist who has assisted scientific institutions in acquisition of primates for experimentation stated flatly that the Head Injury Clinical Research Center should not be allowed to get any more baboons.

Nevertheless, that is just what they have done, using funds under the grants supplied them by the National Institute on Neurological and Communicative Disorders and Stroke.* More baboons have been purchased and are being subjected to axonal injury (or as the researchers refer to it, "slamming") using a machine dubbed Penn II which is so heavy that it can only be located in a basement--the basement referred to in the following colloquy from the tape:

(a) " Why is it so dusty down here? Why, because they're basically incompetent down here. Well, I mean, just in general our procedures cause dust. They don't....They're not regular in cleaning at all, and I've called them three times. When they do clean they're half-ass. Lately the ventilation system has been spewing out some sort of...dust. It's the type of thing....Ya, I don't, you know. I complain about it, but you know....When you come down here it smells like urine."

(b) "We have three months of urine down in the bottom of that thing....Urine asphyxiation...toxicity."

(a) "We had to get her out of that. She was just filling it up with buckets of urine."

When a USDA Animal Care Specialist was dispatched to the University of Pennsylvania a huge number of "deficiencies" were found which the institution at last has, partially

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*According to "National Institutes of Health Grants for 1983" the following grants were made:

Principle Investigator	Project title	Grant number	Dollars
Langfitt, Thomas W.	Head Injury Clinical Research Center	3P01 NS08803-13S1	23,826
Langfitt, Thomas W.	Head Injury Clinical Research Center	5P01 NS08803-14	940,745

corrected under fire. Inspection reports have been withheld under the Freedom of Information Act while USDA completes its investigation. However, those for the period 1983-85 which had been exempt from disclosure were released after an appeal and are now available. Excerpts are attached for use by the Subcommittee.

In the last year for which figures are published, 1983, the University of Pennsylvania received $61,868,650 of the tax-payers' money from NIH. Research grants amounted to $56,637,431; training grants were $4,319,789, and contracts were $911,430.

Mr. Chairman, we request that the Congress withhold from funding all grants of public funds to the Head Injury Clinical Research Center of the University of Pennsylvania for FY86 and that all funding requests by the institution be subjected to the intense scrutiny which this shocking record clearly calls for.

Excerpts from USDA inspection reports of the University of Pennsylvania

School of Medicine, 6/5/84 and 6/6/84: identification of animals was not in compliance and the "Facility in general was in a very poor condition.... ventilation appears to be very poor....Lighting is poor and very poor in some areas....Old rabbit cages in Room 310 and 311 and guinea pig cages in Room 409 need to be replaced as they are in bad repair and rusty....The primate cages do not meet space requirements. Some rabbits in old wire (mesh) cages and 1/2 a cage is not enough room. Overcrowding of guinea pigs in Room 409 cages....Cages and rooms need 100% better sanitation in all rooms. The walls and floors need a good scrubbing down as there is a buildup of urine and debris on walls and floors of all rooms. Housekeeping, dead roaches and equipment, (gloves, ropes, etc.) stored in refrigerator. Mouse droppings and litter all around. Furnace rooms look like dirt, etc. swept into them and other discarded items....No covers on floor drains and puddles of water on floor showing poor drainage. No backflow devices on drains....Cockroaches everywhere you look, mice and vermin droppings observed....Better control of elevator usage in Richards Building would contribute a lot to the deplorable conditions of that building. All animals should be moved out of there immediately....Animal husbandry practices are so poor that we recommended more and better qualified and trained caretakers, and another Veterinarian to assist Dr.

Shalev, as soon as possible....Dogs and cats in same large room, 610 and 611 need a dividing wall between these species."

On 7/10/84 work was in progress for correction of those deficiencies. On 8/10/84 a special inspection of the Johnson Building revealed "Room 129 - floor needs to be resurfaced....Rabbit cages must be cleaned more thoroughly in order to prevent the buildup of urine salts....Extraneous material should be removed from Room 129....Roaches were observed."

An inspection of all parts of the School of Medicine was made on 11/6/84, and deficiencies found then include, "One baboon was observed housed in a cage which did not permit adequate freedom of movement....hamsters Rm 320 Med labs pest control not adequate. Wild mice are able to enter this room as evidenced by the presence of mice droppings." On 2/21/85, "A dog in Room 212 Richards Bldg. was found not to have sufficient floor space....Roaches were observed in Room 324 Med. Labs."

On 7/31/84 a USDA inspector wrote of the School of Veterinary Medicine, "Room 246E - resurface floors in all rooms. In Areas C & D - Re-paint walls, Area E - replace insulation around pipe. Room 244E -in Area D - repaint walls....Rabbits weighing between 6 and 8 pounds must have at least 360 square inches of floor space. In room 138 rabbit cages were observed which do not meet this requirement." On 8/21/84 those deficiencies had not been corrected and more rabbits were found in cages too small for them. On 9/24/84 the floors still had not been resurfaced and insulation around the pipe had not been replaced. A required program of veterinary medical care and euthanasia was not submitted to USDA, as required, until 2/20/85.

Deficiencies found at the Veterinary Hospital were written up as follows: 6/24/83 "The floors in the old surgery wards are in a state of disrepair and need to be resurfaced;" 10/24/83, "Several areas were noted during this inspection where the walls in the old surgery wards need to be patched and repainted....A number of primary enclosures were observed which housed more than one adult cat and did not have elevated resting boards [cited again on 8/21/84];" 7/31/84, "Rooms 2105, 4114, 4412, 4100, 4111 - walls should be repainted where paint is chipping. In old surgery wards - Rooms 271, 270, 266, 263, 273 re-sealed wall junctures, cracks. Room 270 - repaint walls [cited again on 8/21/84 and 9/24/84].... In rooms 2223, 2115, 2112 old dog cages are rusting and in a state of disrepair....In room 2110 of new building spilled food was observed....In old surgery wards - dirty ceilings, dusty air vents;" 8/21/84, "All drains must have covers, pools of water should not be permitted to accumulate in dog pens in new building....Old dog cages are rusting and in a state of disrepair....Dogs were observed...which did not have adequate space allocation....Food receptacles which are bolted to the doors of...dog runs must be sanitized at least once every two weeks....housekeeping should be better.... Excessive accumulation of dog hair....roaches were observed." Also on 8/12/84 records on animals had not been centralized and were not available for inspection. On 9/24/84 the old dog cages had not been repaired nor replaced, and a written plan of veterinary medical care and euthanasia had still not been submitted to USDA.

Ms. Stevens. Last year we submitted a number of quotations from a "USDA Inspection" report we gained under the Freedom of Information Act. Since that time over 200 institutions have been surveyed. I am sorry to say that I must report corroboration of our initial findings in the more extensive study.

The minimum standards of the act are being flouted again and again, yet National Institutes of Health funds flow freely to institutions where multiple deficiencies or alleged violations make the lives of animals miserable and destroy the credibility of research results.

An example is one that you have just heard about; namely, the Head Injury Clinical Research Center at the University of Pennsylvania, which has received, as you know, close to $1 million a year for several years. The videotapes, which I hope you will look at, Mr. Chairman, because I was profoundly horrified when I saw them, you see the members of the team that joined in a strangely festive atmosphere which prevailed from time to time in an admittedly filthy laboratory, demonstrates a variety of abuses which the average citizen would never condone. The public, nevertheless, is compelled to foot the bill with no say in what is done with our tax funds or what suffering the animals undergo under the generalized concept of scientific advancement, which of course everybody wants. The trouble is getting down to the brass tacks.

Responsible officials at the University of Pennsylvania refused to view the tapes, though we have been brought up to believe that scientists are eager to review the evidence and learn the truth. These men avert their eyes from the unpleasant facts and, instead, level charges that the tapes have been tampered with, although they offer no evidence to back up their allegations.

Mr. Chairman, this is a shameful case of arrogant bluff which the Congress should not tolerate. It demonstrates how severely money has pushed its way into an area where all of us wish, and many of us still believe, that idealism rules. Paul de Kruif's "Microbe Hunters" still haunts our dreams, our hopes for perfect health.

Albert Schweitzer, however, reminds us that experimenters should never quiet their consciences with the conviction that their cruel action may in general have a worthy purpose, but yet in every instance must examine it. That is why we come to you and hope you will help them to do that.

Now, as you undoubtedly know, the tapes were obtained by the Animal Liberation Front, which seeks to discredit all animal experimentation. I want to emphasize this point to distinguish the ALF philosophy from that of groups such as the Society for Animal Legislation which seek reform, not abolition.

You have heard about the tapes so I would like to mention, though, that scientists with whom I have looked at these tapes have been appalled. One primatologist who has assisted scientific institutions in acquisition of primates for experimentation stated flatly that the Head Injury Clinical Research Center should not be allowed to get any more baboons.

Nevertheless, that is just what they have done, bought more, using funds under the grant supplied them by the National Institute on Neurological and Communicative Disorders and Stroke. More baboons have been purchased and are being subjected to axonal injury—or, as the researchers refer to it, slamming—using a machine dubbed Penn II, which you have just heard about.

I am attaching some of the quotations from USDA reports, excerpts by the subcommittee. I would just like to emphasize in 1983 the University of Pennsylvania received $61,868,650, which is a very, very large grant. We request that the Congress withhold from funding all grants of public funds to the Head Injury Clinical Research Center of the University of Pennsylvania for fiscal year 1986 and that all funding requests by the institution be subjected to the intense scrutiny which this shocking record clearly calls for. Thank you.

Senator WEICKER. Thank you very much for your testimony. It will be included in its entirety in the record. It is always good to have you here, of course.

Ms. STEVENS. Thank you.

STATEMENT OF FREDERICK A. KING, DIRECTOR, YERKES REGIONAL PRIMATE RESEARCH CENTER

Senator WEICKER. Frederick King, director of the Yerkes Regional Primate Research Center.

Mr. KING. Thank you, Mr. Chairman. It is a pleasure to be her would like to request that my statement that I sent in earlier cluded in the record.

Senator WEICKER. It will be.

Mr. KING. And also, if acceptable to the Chair, I would like to request an article I published recently, that just came out this month in the Journal of the American Physiological Society on the benefits of primate research, be included as well.

Senator WEICKER. It will be.

Mr. KING. I am appearing before this committee today as a spokesperson for the seven regional primate research centers sponsored by the National Institutes of Health. This is a program that was initiated in 1960 and became operational by 1965.

The goal of the program is to create centers which would possess the primates and the expertise and facilities to serve as regional and national primate resources in the study of medical and behavioral disorders of humans.

Each primate center is a part of a host institution or university and must compete in NIH peer review for its operational grant through the Division of Research Resources of NIH.

The current 1985 budget for all of the primate center taken together is $22,400,000. This covers all base operating expenses of the seven centers; that is, both direct and indirect costs. However, because of the current OMB directives and maneuvers of the Federal administration concerning NIH funds, the amount that will be available to the primate centers in 1986 is estimated to be $19,200,000, a reduciton of $3,000,000 or 14 percent.

It should be noted that the NIH–DDR Council, responsible for the approval of these grants and permit review, has actually authorized $30 million for primate research, although obviously these funds are not available.

So my purpose in being here is to tell you a little bit about the contribution of and the importance of the centers to our Nation's health and to request of this committee that for 1986 the primate centers program receive $27 million, an appropriation that will still be $3 million below the NIH–DDR Council level.

Any committee or body concerned with funding, of course, is concerned with determining whether in this case the primate centers have met their obligations to the advancement of our knowledge of human health and whether they are serving the Nation as they were intended to. With regard to this, each primate center has not only a group of scientists of its own working permanently at the center, but also conducts research programs with dozens of institutions and hundreds of scientists across the Nation. There are about 600 scientists in other institutions that the primate centers provide the wherewithal to carry out health related research that has to be done in primates because of their unique and critical biological similarities to humans.

For the relatively small amounts of Federal funds involved, the primate centers are indeed a bargain today and a unique national resource.

I would like to tell you that since 1975, when there were 238 research projects going on in the primate centers, in 1983 there were 573 projects. The scope of the research covered is important to human health. It ranges from visual impairments, such as glaucoma, cataracts, other disorders of the eye, through major bacterial, viral, parasitic and immunological diseases, for which primates are critical because they spontaneously and naturally develop over 100 human and medical conditions. Many other additional diseases can be induced in primates but not other animal species. These also include degenerative diseases such as diabetes, arthritis, cystic fibrosis and the process of aging.

In the realm of behavioral and neurological disorders, the primate centers carry out programs in Alzheimer-related research, Parkinsonism, depression, and mental retardation, as well as studies on the social aspects of mental health.

If one doesn't think the primate research is important or worthwhile, just ask the mother of a retarded child who for the first time has been able to communicate verbally with that child because of research on primates.

We also are, I think, extremely helpful in the educational side of things since we train many kinds of students, including graduates, undergraduates, medical, veterinarian, and other students.

I think I will simply summarize this.

PREPARED STATEMENTS

Senator WEICKER. Your statement will be included in the record at this point along with other statements for the record on appropriations for the Division of Research Resources.

Mr. KING. Thank you.

Senator WEICKER. Thank you very much.

I want to ask all the witnesses to please keep within the time limits. There are apparently those who have to make planes. I will try to accommodate that, but let's keep it moving.

[The statements follow:]

STATEMENT OF FREDERICK KING

I am Dr. Frederick A. King, Professor of Anatomy and Psychology and Associate Dean of the Emory University School of Medicine in Atlanta, Georgia. I am also Director of the Yerkes Regional Primate Research Center which is a part of Emory University.

Today, I appear before this committee as a spokesperson for all seven NIH-sponsored region Primate Research Centers. These centers are, respectively, associated with the following universities: University of California at Davis, Tulane University, Harvard University, Oregon Health Sciences University, University of Washington, University of Wisconsin, and Emory University.

This program was initiated in 1960 and became operational by 1965. The purpose of the program was to create centers which would possess the primates, the expertise and facilities to serve as regional and national primate resources in the study of medical and behavioral disorders of humans. Each primate center is a part of a host institution or university, and must compete in NIH peer review for its base operational grant, through the Division of Research Resources of NIH.

The current 1985 budget for all of the primate centers is $22,398,000. This covers all base operating expenses of the seven centers; that is, both direct and indirect costs. However, because of current OMB directives and maneuvers of the federal administration concerning NIH funds, the amount that will be available to the primate centers in 1986 is estimated to be $19,200,000, a reduction of $3,000,000 or 14%. It should also be noted that the NIH-DRR Council has actually authorized $30,000,000 for primate research centers' expenditures, although obviously the funds are not available.

My purpose in being here is to inform you of the contributions and importance of the Centers to our nation's health , and to request of this committee that for 1986 the primate centers program receive $26,877,600, an appropriation that will still be $3,000,000 below DRR Council ceiling.

I would like to address briefly certain issues that bear on this request and the value of the primate centers.

Of primary importance is the question of whether the Primate Centers are deserving in the sense of having met their obligations to the advancement of our knowledge of health and illness, and are they serving the nation as they were intended to do.

1. Each primate center has not only a group of core scientists permanently based at the center, but provides resources to scientists throughout its own host university and across the nation. Collaborative and affiliate scientists from a wide range of institutions come to the primate centers and are provided with the necessary animals, space, services and scientific cooperation to carry out health-related research that must be done in primates because of their unique and critical biological similarities to humans.

   In 1975, there were 432 such collaborating scientists representing dozens of institutions and states throughout the country. By 1983, there were 539 such affiliates, a seven year increase of over 100 investigators. At the Yerkes Center alone, there are now about 80 such individuals, many of whom have been added since 1983. The progress that has been made by the centers in serving the regional and national needs of other institutions is evident. It is clear that for a relatively small amount of federal funds, the primate centers meet the needs of many of our nation's universities and research institutions.

2. The number of research projects in these centers has more than doubled from 1975 when there were 238 studies, to 1983 when there were 573 projects. The research covered in these investigations ranges from visual system studies on impairments such as glaucoma, strabismus, cataract and other disorders of the eye, through major bacterial, viral, parasitic, and immunological diseases for which primates provide well over a hundred naturally occuring disorders. These also include degenerative diseases such as diabetes, arthritis, cystic fibrosis and the process of aging. Cancer and heart disease are also topics of investigation, as are problems of reproductive physiology including fertility and infertility. In the realm of behavioral and neurological disorders, the primate centers carry out programs in Alzheimer-related research, Parkinsonism, depression and

mental retardation, as well as studies related to social aspects of mental health such as adolescent development and adjustment, mother-infant relationships, agression and violence, sexual disorders and drug abuse.

3. Biomedical and behavioral education is also benefited as a result of research in the primate centers. The number of graduate students who receive research training has increased from 163 in 1975 to 178 in 1983. Most centers also now provide research training and experiences for undergraduates and medical, dental and veterinary students as well.
4. The primate centers are far less dependent upon importation of primates than they once were. This is in the interest of both conservation of primate species and economy. In 1975 the centers produced 1055 primates. Through a strengthening of new breeding programs, this figure has doubled, reaching 2095 in 1983 and is still rising.
5. The primate centers make an extremely important contribution to hundreds of scientists and institutions across the country by providing expert consultation and advice on the use of primates in research, bibliographic services, clinical records of primate diseases, and normal and pathological specimens of blood, serum, tissues and organs. For example, the Yerkes Center now provides annually over 1000 biological specimens to more than 60 outside investigators and institutions. This compares most favorably with about 300 specimens to 26 outside scientists back in 1975.

I also wish to mention the immense importance of base grant support in permitting the primate centers to be successful in seeking and receiving research grants and contracts for specific biomedical and behavioral projects related to health problems. All the seven regional primate centers have worked extremely hard and quite successfully in generating funds earmarked for both basic and clinically oriented research related to particular disease entities. I have attached two graphs to this testimony reflecting the increase in such funds for the Yerkes Center over the past five years. As the first graph shows, the Yerkes Center now administers almost 30% more individual research grants than it did 5 years ago, and has increased the amount of monies received from other institutions and units of our own university from practically zero to a useful sum.

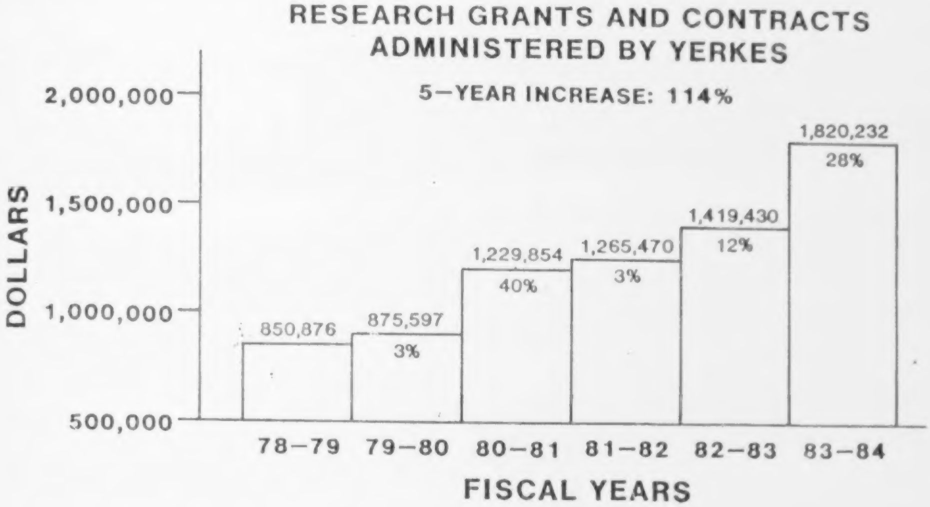
Finally, I would like to mention some of the very real consequences of the cutback we already face, or a static budget allocation.

First, the primate centers were built in the early 1960's and while there have been two helpful and modest renovation appropriations by Congress for which we are most grateful, funds are still badly needed for renovations, major repairs and replacement of equipment essential for the continued basic operations of the centers. A cutback or static budget will make it virtually impossible for us to achieve these necessities.

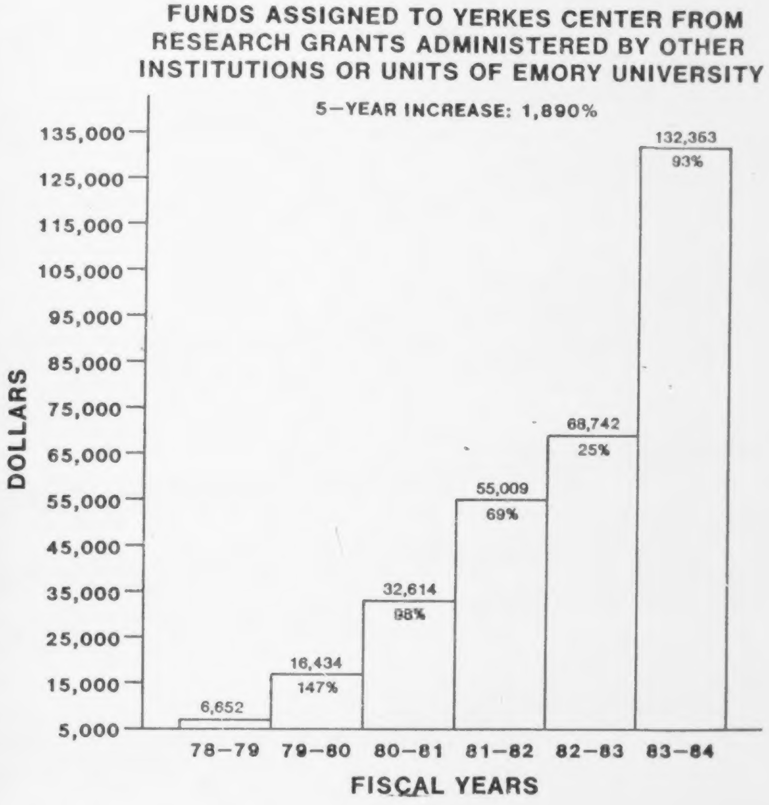
Further, if because of insufficient base grant funds we suffer a loss of scientists and resources representing the unique expertise and facilities of the centers, this will be quickly reflected in a decline in support from a variety of public and private agencies for specific research projects.

Finally, advancement of our knowledge in several medical and behavioral areas will suffer a serious setback. It is important to recognize that primates possess unique similarities to humans in their susceptibility to degenerative and infectious diseases, their immunological responses, their reproductive biology, their nervous systems and their intellectual and social behaviors. For the study of many health problems these valuable similarities simply cannot be duplicated in other species. There is no question that the United States now leads the world in the field of medical and health-related behavioral primatology. That advantage will be seriously eroded without adequate federal support.

In summary, we are requesting that the NIH-sponsored primate centers program receive $26,877,600 which is still well below NIH council ceiling. We also wish to request that this committee include in its report, language that would stress the past and present contributions, and the continued importance of the programs of the present primate centers. We respectfully request also that so long as they continue to be successful in fulfilling their national obligations, the present primate centers be protected from future funding cutbacks in any form, including assigment of their funds to similar or additional programs. We urge that this committee undertake the preservation of a program that effectively serves the nation's health research needs in a unique fashion and with special resources that are unduplicated elsewhere. On behalf of the NIH-sponsored primate research centers, I thank you for your attention and consideration.


RESEARCH GRANTS AND CONTRACTS ADMINISTERED BY YERKES

5—YEAR INCREASE: 114%


FUNDS ASSIGNED TO YERKES CENTER FROM RESEARCH GRANTS ADMINISTERED BY OTHER INSTITUTIONS OR UNITS OF EMORY UNIVERSITY

5—YEAR INCREASE: 1,890%

Health Benefits of Animal Research

Medical and Behavioral Benefits from Primate Research

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Primates share more biological and behavioral characteristics with humans than do other animal species. These striking similarities begin in the basic chemical component of life, the deoxyribonucleic acid (DNA) in human genes. Ninety-eight percent of our DNA can be found in primates. Our genetic relationship to primates, the consequence of our relatively recent common evolutionary ancestry, is manifested in a similarity of development and functioning of the nervous system, particularly the brain, reproductive structures and physiology, cognitive and social behavior, immunological defenses, and other characteristics, some of which are virtually unique to humans and primates.

In the realm of behavior, humans and apes alone seem capable of symbolic referential and linguistic communication. Primates are the species that approximates most closely human maturational and reproductive events. For example, in the great apes, the menstrual cycle is virtually identical to that of human females, and the maturational phase of adrenarche in human males is apparently found only in the apes. Because of great immunological similarities, humans and primates are susceptible to many of the same infectious diseases.

While anthropologists study primates for clues to human origins and nature, psychologists examining social organization and interactions in primates seek to understand principles governing affiliative relationships, sexual behavior, aggression, and other social behaviors. In neurobiology, immunology, pathology, reproductive biology, teratology, neonatology, and cardiology, primates have become critically important and, in some cases, indispensible research models for both understanding basic biological mechanisms and the development and testing of new approaches to diagnosis and treatment.

We present here a sampling of the contributions of primate research to human health and welfare. For reasons of space, not all areas of study are mentioned, but we have attempted to show, through examples, the value and breadth of primate research. For convenience, the term "primate" is used throughout this article to refer only to nonhuman primates.

While the topic of primate conservation is not covered in this article it is a matter of serious concern and deserves mention. The human population explosion and resulting encroachment and destruction of primate habitats in Africa, tropical America and Asia have threatened the future survival of many monkey and ape species in the wild. Primatologists and other research scientists have become increasingly active in primate conservation through the protection of natural habitats and the development of captive breeding programs in this country and abroad, as a societal and scientific obligation.

Atherosclerosis

Until the 1960s, laboratory animals employed in cardiovascular research were primarily rabbits, chickens, dogs, rats, and swine. Primates became major subjects of heart research as a result of studies indicating that atherosclerotic plaques that develop in both monkeys and humans are virtually identical in both gross and microscopic appearance and biochemical composition (13, 14, 137, 138, 139). Primates now are used in cardiovascular studies with the following aims.

1) Identifying the mechanisms of atherosclerotic destruction at cellular and molecular levels (114). Under investigation are the changes that occur in the composition and metabolism of lipoproteins with advancing age and disease.

2) Determining the course and progress of atherosclerotic disease and the way that steps in this process can be interrupted or prevented (142). A recent research focus is the development of asymptomatic lesions in young primates (50) and the role of diet, blood pressure changes, and other factors in the advancement or stabilization of the lesions (83).

3) Defining the relative influence of risk factors (149) (hypertension, diabetes, tobacco, alcohol, gender, fats and other nutrients, obesity and heredity) on disease progression, regression, and prevention.

The importance of dietary lipids and lipoproteins as risk factors has been demonstrated in diet-induced primate models of atherosclerosis (99). Studies also have shown that diets devoid of, or low in, cholesterol can reverse atherosclerosis in monkeys (71, 123). It has been found that plaque produced over a long period is as amenable to regression as plague produced over a short period (99). These and related findings suggest that at all ages humans may reduce risk of heart disease through diet.

The role of exercise in heart disease is also under investigation in primates (114). Research with monkeys exercised on a treadmill indicates that exercise may help reduce the disease and slow the development of plaques even when diet is high in fat (63).

Psychophysiological studies involving blood pressure and cortisol levels (129) are being conducted with primates to determine the role of stress in the development of cardiac disease. Research on monkeys living in stable, as opposed to stressful, social environments indicates that psychosocial stress can act independently of, or synergistically with, diet and other factors to exacerbate heart disease (70, 119). For example, socially stressed monkeys fed low-fat diets develop more extensive heart disease than comparable groups of unstressed animals. Such studies may explain the occurrence of heart disease in humans with low or normal serum lipids and normal values for other suspected risk factors. Thus, ongoing and future studies should define how social and psychological factors interact with other environmental conditions, drugs, and diet to alter the course of heart disease.

In other primate studies, the amount of dietary cholesterol is varied to induce atherosclerotic lesions which mimic the several levels of disease progression that occur in humans (151). In one study of social groups of monkeys, genetic control of an animal's hyper- or hyporesponsiveness to dietary cholesterol is being evaluated (15). The results may help clarify the role of heredity as a risk or protective risk factor.

Primates are also used in studies of drugs (48) and other agents that change the metabolism of cholesterol. Two agents, cholestyramine (111) and alfalfa seed (71), have been shown to produce regression of the disease in primates fed high cholesterol diets. Possible mechanisms responsible for the regression are being evaluated.

The study of advanced atherosclerosis leading to ischemic heart disease and myocardial infarction (150) is a relatively recent area of primate research involving interventions intended to limit the infarct, reduce the frequency of ventricular fibrillation, and control congestive heart disease (149).

Obesity has long been associated with heart disease, and as a result of primate research a new approach to the control of body weight is being investigated. Studies with monkeys demonstrated that insulin levels in the blood regulate appetite by signaling the brain how fat or thin the body is. It has been known for many years that the amount of insulin secreted from the pancreas is directly proportional to body weight: obese individuals secrete more insulin than do thin people. However, the amount of insulin in the blood does not correlate well with body weight. In primates, it was shown that some of the insulin in the blood enters the cerebrospinal fluid and thereby gains access to the brain. The amount of insulin in the cerebrospinal fluid is directly correlated with body weight. These studies suggest that the amount of insulin secreted per day may modulate food intake to maintain a constant body weight. The clinical use of this feedback system is being evaluated (152).

Aging

The "graying" of the American population and the recognition of the socioeconomic and personal costs of the physical and mental problems of the elderly have focused attention on the need for research on aging. Primates are proving to be important animal models for these studies.

Primates experience many of the age-related changes in mental function, behavior, anatomy, and physiology that humans undergo (88). Learning and memory deficits can be detected in aged primates (4). These animals also have lower levels of certain neurotransmitters, and in the cerebral cortex the capillary walls are thinner, suggesting changes in the blood-brain barrier with age. As primates age, coronary vessels thicken, a common antecedent of atherosclerosis in humans that is often related to the behavioral deficits observed in both aged humans and primates (8).

These and other physical and behavioral similarities between aging humans and primates have been documented in large part by studies at the National Institutes of Health's regional primate research centers. Established in the early 1960s, several centers have colonies of aging rhesus monkeys over 20 years old. One center has a large group of chimpanzees between 45 and 55 years of age. In the wild, these apes rarely live beyond their mid-30s. The research value of these aging primates was emphasized by Dr. Edward Brandt, Assistant Secretary for Health, at a meeting marking the 20th anniversary of the NIH primate research centers program. "As we begin to delve more deeply into the health problems of the aging human, we will be turning more frequently to nonhuman primates for cues. That such research is possible is, to me, one of the greatest accomplishments of this important program" (personal communication, Dr. E. Brandt).

In 1981, one NIH-sponsored primate center launched a 5-year study to determine the impact of diet on biological mechanisms in aging. Two groups, of 36 monkeys each, ranging in age from 4 to 26 years are being studied. This age span is roughly equivalent to 12 to 75 years in the human. One group is fed a semipurified diet high in fats, cholesterol, sugar, and salt; the second is given an alternative diet containing the same number of calories but differing markedly in the proportion of fat to carbohydrate. The alternative diet contains one-sixth the amount of cholesterol, one-fourth the salt, and one-half the sugar of the semipurified diet. Neither diet has alcohol, caffeine, or common food additives or preservatives. Before the study began, base-line data on 48 health indicators were obtained. Periodic checks are documenting how the animals differ as they age and the degree of individual variability within each study group. Under evaluation are the animals' immune and cardiovascular systems, hormonal responses, bone density, neural structure, and social behavior. Researchers also are checking for evidence of atherosclerosis, senile macular degeneration, and periodontal and degenerative bone disorders (112).

In psychopharmacological studies on aging, primates are used to determine the ability of drugs to reduce age-related memory loss. Research has also revealed that aged primates have deficits in memory for recent, but not immediate, events, an increased sensitivity to interfering stimuli, and decreased behavioral flexibility. These changes, which are similar to the behavioral impairments that occur in aged humans make primates excellent models for studying intellectual and social aspects of aging and attempting experimental interventions and treatments (4).

The role of the brain and hormones in the control of the "hot flashes" and other signs of menopause, a stage in the aging process, is being comparatively studied in postmenopausal monkeys and young ovariectomized monkeys. The development of more effective treatments for the millions of women who suffer menopausal symptoms depends on improved understanding of the underlying mechanisms, which can often be best achieved in animal models (105).

Behavior

Five decades ago, when Dr. Robert M. Yerkes established this country's first institute for primate research, the ability of scientists to correlate observed behavior with physiological activities was extremely limited. Over the past half century, the development of sophisticated methodologies in behavioral and biological measurement now permit a vast array of studies on biological, environmental, and social influences on aggression, dominance-submission, sexual development, mating behavior, maternal-infant relationships, and other primate behaviors.

Endocrine and Seasonality Influences on Reproductive Behavior

Research on primate social behavior has recently focused attention on female sexual maturation, reproductive strategies, infant care, and the influence of social, environmental, and biological factors on reproduction. Results of this research have challenged the assumption that female primates are biologically emancipated from the endocrine influences that govern the reproductive behavior of the majority of mammalian species. Research with groups of rhesus monkeys has correlated female sexual behavior with cyclic hormonal patterns (31) and has demonstrated that the hormonal changes triggering ovulation also initiate a behavioral pattern which signals the male that the female is fertile (31, 143). The female rhesus does not passively attract the male but actively seeks out and initiates sexual activity with males in which she is interested. Female proceptivity, i.e., expression of sexual interest, helps ensure that mating occurs at times of maximal fertility (144). At least one research study indicated that women also may have a midcycle increase in their sexual interest (1).

Besides improving scientific understanding about the roles of the female and the male in rhesus sexual behavior, these studies have provided a model system for evaluating the behavioral and biological effects of hormonal treatments, such as contraceptives and posthysterectomy therapies. In a recent study, an experimental hormonal contraceptive muted the typical midcycle sexual behavioral pattern of female rhesus monkeys living in a social group. Research on the behavioral changes induced by hormonal therapies continues, and the results may indicate that behavioral as well as biological effects of hormone medications should be evaluated by pharmaceutical companies and considered by physicians in prescribing these drugs (143a).

Research on the factors responsible for rhesus monkeys' seasonal fertility patterns, a paradoxical phenomenon for a menstrual primate, may identify new mechanisms that could be used to achieve human fertility control or to correct human infertility. Results of this research should also improve the captive breeding of rhesus monkeys, which no longer are imported from the wild but are important for medical and behavioral research.

Studies of social groups of rhesus monkeys housed in outdoor enclosures have defined the endocrine changes responsible for the onset of the breeding season and its abrupt cessation 5 months later. During the breeding season copulation is generally restricted to the periovulatory period (31, 147). In contrast, rhesus monkeys housed indoors and tested in a pair cage environment typically mate year-round and throughout the menstrual cycle (78), although with a lower frequency during some phases and a clear peak at midcycle. The seasonal pattern of mating that occurs in outdoor social groups of rhesus monkeys, and in primates living in their natural habitats, is illustrated by a study in which the breeding males of the group were vasectomized to prevent pregnancy. The females displayed the same cyclic hormonal and behavioral changes that occurred when they were with fertile males. The females mated with the vasectomized males, but the mating season ended abruptly after 5 months, even though the females were not pregnant.

At one primate research center where breeding seasonality is being investigated, the onset of the rhesus monkey mating season occurs in late summer or early fall, and mating ceases in the spring. As a result, the variation in light cycles that accompany these changes is theorized to be the environmental factor underlying the seasonal mating pattern. The absence of light-cycle variation in indoor housing may explain the year-round mating that occurs under these conditions. The mechanisms by which day length influences ovulatory activity are also being explored. Current research suggests that photoperiod inhibits ovulatory cycles during long days by altering ovarian and pituitary function. To test this hypothesis, the photoperiod is experimentally manipulated (31).

For many decades psychologists have tried to determine how male and female behavioral patterns and psychological traits originate and develop in humans. One theory is that these traits are based on learning and experience (33, 95). Research with primates, however, has shown that sexual differences in anatomy, physiology, and behavior are based substantially on the relative presence or absence of prenatal androgens during a critical period of fetal development. Whereas female characteristics are determined by the prenatal absence of androgens, male characteristics are determined by the prenatal presence of androgens (157).

Experimental manipulation of prenatal androgen levels powerfully influences the kind of typically male or female behavior that develops in primate offspring. Prenatal androgen treatments typically masculinize the external genitalia and impart male psychological traits to genetic rhesus females. These studies indicate that the sociosexual behavior of rhesus monkeys is a product of the interaction of their prenatal endocrinological environment as well as their learning and social experience (34, 95). Besides suggesting possible biological factors that influence human sexual orientation, this research provides basic information about gender development that may be used to derive therapeutic treatments for gender-related problems.

Development of Emotional Expression

The biological and social events that contribute to normal and abnormal behavioral patterns are under intensive study in primates. Research on the effects of varying types and degrees of infant separation from mothers and mother surrogates have documented the importance of emotional care and stimulation for the short- and long-term psychological health of the offspring. Research with young primates and observations of orphaned children revealed that nutritional and physical care is not enough. If deprived of emotional nourishment, i.e., attention and expression of affection from the mother or peers, a child or infant primate may not survive or may be impaired both emotionally and in its cognitive development and interaction with social others. Such individuals may be unable to establish normal social relationships and may suffer intellectual impairment as well (60, 90, 135).

For example, a recent study has shown that adolescent monkeys which as infants had experienced separation from their mothers reacted to separation from their peers more negatively than monkeys which had grown up with their mothers. These results indicate that strong emotional nourishment during development improves the individual's ability to cope with subsequent social stress. This work also suggests that since young children react to divorce with varying degrees of depression and other behavioral disturbances, the rising divorce rate may generate an increase in the number of adult cases of depression (61).

Research on depression in young primates has identified short- and long-term physiological changes in heart rate, immune response, sleep patterns, activation of the adrenocortical system, and neurotransmitter synthesis, uptake, and metabolism in the brain (77, 108). These effects resemble the disordered physiology of human affective disorders and provide an opportunity for scientists to understand the psychophysiological concomitants of disease as well as the origins and development of psychosomatic disorders.

Also under investigation are the general physiological mechanisms that contribute to behavioral and life history patterns. Primate species that have different behavioral patterns also differ in the relative balance between the sympathetic and parasympathetic components of their autonomic nervous systems. Similar physiological differences also have been detected in monkeys which belong to the same species but which have different behavioral coping patterns as a result of differing early social experiences (9).

Studies with young monkeys also indicate that genetic factors and predispositions contribute to the development of behavioral problems such as chronic anxiety (134). In one study, monkeys that were separated at the same age from their mothers and lived in identical environments did not respond similarly to novel situations or to normal day-to-day experiences. Abnormal behavior such as timidity and anxiety was observed in some animals. An investigation of the percentage of these timid and anxious young monkeys found common paternal or maternal lines (133). The possibility of a genetic predisposition to be timid and anxious is being explored.

A primate model has recently been developed for chemically induced anxiety by the injection of a β-carboline derivative. Within minutes following injection, monkeys displayed physiological and behavioral signs of anxiety. Primate research on the neurochemical basis for anxiety may help improve pharmacological and other treatments for chronic anxiety which affects 10 million persons in the United States so severely that they seek professional help (80, 84, 136).

Many primate studies focus on the physiological and chemical mechanisms in the brain's response to drugs. New pharmacological compounds designed to treat human behavioral disorders are screened in primate models. A relatively new area of drug research involves the effects on the social organization of primate groups of drugs that humans may abuse. The results indicate that social factors such as dominance rank or position mediate the behavioral effects of psychoactive drugs (127).

Aggression and violence play major roles in both human and primate societies. Through research on social living groups of primates, scientists hope to identify the mechanisms responsible for the control and expression of aggression. Much of this research has been conducted with rhesus monkeys. Although adult rhesus are capable of inflicting lethal wounds, the agonistic encounters of these monkeys are rarely fatal because their aggression is typically characterized by noncontact forms of expression (5–7). According to a current study, this behavioral pattern, which minimizes the disruption of the social group, must be learned by young rhesus males. In one study, the socialization of young rhesus males is monitored in a social group with adult males and females and juveniles of both sexes and a group in which the adult males have been removed. If the adult males are the socializing agents, as they are theorized to be, the young males in the second group will grow to adulthood using biting and other contact forms of expression much more frequently than their counterparts in the first group. The results of this research may provide a new approach to the understanding of the origins of aggressive behavior in human society (154). This research may reveal that the psychological health and coping ability of males can be greatly influenced by an adult male role model during childhood.

Another influence on the way that rhesus monkeys handle conflict is the dominance hierarchy. Many primate species live in groups whose social structure is based on dominance-submission relationships, a pecking order that is generally nonlinear and highly complex. When two monkeys want the same object, the lower-ranking animal typically submits rather than fight with the higher-ranking animal and its allies. Comparative studies of humans and primates indicate the importance of learning and social context in dominance-submission relationships. In primate groups, dominance rank is based primarily on social skills, alliances, and other behavioral patterns that are inherited or acquired through learning from the mother. Dominance rank is not permanent; it can change when an animal joins a group, a death occurs, new alliances are formed, or for unknown reasons. The results of such studies with primates have obvious relevance for the development of hypotheses about the nature and origins of human social interactions (6).

Research on dominance relationships in primates and other animals has influenced several psychologists to study peer relationships among children and adults. One group of psychologists studied a group of preschoolers and identified a dominance hierarchy in terms of "attacks" and "retreats" and found that 76% of the "property fights" among these children could have been predicted by the status of the children involved (132). These comparative studies indicate that humans who work, live, or socialize in small stable groups sort one another out in a hierarchial pattern which clearly influences the behavior of the group and its members.

Communication

Beginning with Dr. Robert M. Yerkes' pioneering studies (155) in the 1920s, psychologists have been probing the mental capacities of primates in order to understand their intelligence, perception, and communicative abilities. The results of this research improve our understanding of the cognitive abilities of primates and the origins of human language and intelligence.

Among the most exciting approaches to primate cognition are the several studies on the ability of chimpanzees and other apes to learn and use language. Because primates do not have the neural and vocal apparatus required for human speech, ape communication studies use an artificial language – American Sign Language (22, 29, 89), manipulatable plastic symbols (93), or geometric symbols on a computer-operated keyboard (115).

These studies have demonstrated that apes can develop large vocabularies and make novel uses of their language. In one study, two subadult chimpanzees use symbols not only to communicate with each other but also to refer to objects, people, and events not immediately present. Referential communication, the accrual of meaning to arbitrary symbols so that they represent the actual referents in communication, is regarded as a key characteristic of human semantics (118).

Although apes have not evolved cognitively to a degree that ensures spontaneous development or acquisition of language, with concerted effort certain aspects of language can be taught to them. As a result, apes are useful and unique models for studies on the evolutionary conditions under which language may have emerged in humans (116).

Research on the apes' communicative abilities has also provided a practical benefit to human society. A new approach has been developed for teaching language to human children who, because of severe mental retardation, cannot learn language as normal children do. The computer-operated keyboard and lexigram system of symbols that were developed with apes have been used in the teaching of language to these handicapped young people. This system has enabled individuals who were previously without language to interact with others and, as a new experience in their lives, be able to express their thoughts, feelings, and needs and to understand and respond linguistically to their parents and teachers. With further refinement, this new instructional method and communication system may be used in schools and homes of the retarded (113).

A recent demonstration of the way in which monkeys communicate with each other about external objects and events in their environment came from a study of vervet monkey troops in the wild. Tape recordings were made of the troops' alarm calls in response to specific predators, i.e., pythons, leopards, and martial eagles. The group's behavior also was documented. When the audiotapes were played back to other groups of vervet monkeys, the animals behaved as if the specific predator was there. For example, when the tape recording of the alarm call for an eagle predator was played, the vervet monkeys looked up into the sky and took cover under a bush. When the alarm call for snake predator was played, the animals responded by looking at the ground and climbing a tree. Analysis of the primates' calls on the sound spectrograph revealed distinct patterns associated with specific behaviors. Thus, the components of primate vocalizations may function similarly to words of human language (124). By studying the vocalizations of primates, information may be obtained that could improve our understanding of the origins of human language.

Infectious Diseases

The understanding and control of many infectious diseases such as poliomyelitis, yellow fever (18), measles (56), rubella (47) and hepatitis B have depended on research with primates. Unconventional infectious agents known as slow viruses have been identified in primate studies (27). Because of the striking immunological similarities to humans, primates may prove to be the only laboratory animals susceptible to acquired immune deficiency syndrome (AIDS).

Slow Viruses

Chimpanzees were critical for Gadjudsek's discovery that a slow virus must be the infectious agent of kuru, a fatal brain disorder affecting a New Guinea tribe. Several laboratory animal species were inoculated intracerebrally with brain material from deceased kuru victims, but only chimpanzees proved susceptible (28). Since 1975, when Gadjudsek received a Nobel Prize in Medicine, other primate species have been infected with the kuru slow virus. Primates also are involved in research on the possible role of slow viruses in AIDS, Alzheimer's disease, and other degenerative disorders.

One likely candidate for the slow virus group is the JC virus, which induces brain tumors in owl monkeys and squirrel monkeys. These animals are under investigation as a model for virus-induced human brain tumors. Results of this research may contribute to the diagnosis and treatment of certain human brain tumors (96).

Polio

The conquest of polio began in 1909, when Landsteiner and Popper demonstrated that poliomyelitis could be transmitted from humans to apes and monkeys (65). Primates became a key animal model for studies on the pathogenesis of polio and for vaccine development when it was recognized that among animal species only primates could contract human poliomyelitis. Using monkeys as test subjects in 1953, Salk developed the killed polio vaccine used in many countries today; and in 1959, Sabin developed the live attenuated vaccine currently used in the United States.

The health impact of the polio vaccine has been dramatic. In the peak year of the polio outbreak during the 1950s, there were ~50,000 cases of the disease. Many victims died or were permanently crippled. In 1982, only seven cases of polio were reported in the United States. Primates still play a role in the conquest of polio in the production and efficacy and safety testing of vaccine before it is released for human use (91). The importance of safety testing was emphasized in a 1982 World Health Organization publication which referred to the disastrous effects that would result "if a batch of live polio vaccine were to be released without being fully tested in nonhuman primates . . . . Vaccines are given to young healthy infants, often in mass campaigns before the danger is recognized. Safety testing in animals is humanity's only guard against such potential disasters" (153).

Yellow Fever

Research with primates clarified the difference between the urban and jungle types of yellow fever, and studies of the disease in monkeys led to the production of the first yellow fever vaccine (17). Because South American monkeys are the major reservoir of yellow fever in the New World, the health of these monkeys is monitored in the wild as part of public health surveillance (81).

Hepatitis B

Hepatitis B is a viral disease that annually afflicts 200,000 persons in the United States alone. There are ~200 million carriers of hepatitis B worldwide. At least 3 million infants born in southeast Asia alone will acquire the infection at birth. Many will become carriers and develop severe liver damage including liver cancer (55). In 1981, the US Food and Drug Administration approved the world's first hepatitis B vaccine (74). This major advance depended on research with chimpanzees and other primates, since hepatitis B cannot be transmitted to other laboratory animals, and until recently, the viral agents which transmit hepatitis could not be successfully cultivated in vitro. Marmosets and chimpanzees currently are being used to study hepatitis A and hepatitis non-A, non-B (10, 17, 106).

Malaria

Primate studies on the pathogenesis of malaria showed that all four species of human malaria pathogens have a fourth, or liver, stage which can remain asymptomatic indefinitely until the parasites are released into the blood stream. It is then that relapses of malaria occur (156).

Potential treatments against malaria, a disease that affects 200 million people worldwide, have been tested in primates. Vaccine development and testing are the current focus of malaria research as a result of the development of malaria-bearing mosquitoes resistant to insecticides and the appearance of drug-resistant malarial parasites. In one study, chimpanzees are inoculated with human blood containing different species of the *Plasmodium* parasites. The parasites from the chimpanzees' blood are used in the development of monoclonal antibodies that may be the major component of a malaria vaccine (94, 153).

Yersiniosis and Filariasis

Yersiniosis, an increasingly common infectious bacterial disease of humans, is being studied in monkeys in which the clinical and pathological features of the disease are comparable to that in humans. These primates are being used to study the epidemiology, pathogenesis, and pathogenicity of various *Yersinia* species and serotypes, particularly the so-called environmental strains of the bacillus. The spontaneous occurrence of a significant number of yersiniosis cases in primates also provides the opportunity to evaluate postinfection disorders, the most notable being reactive arthritis and amyloidosis (75).

Primates also are involved in studies on a variety of tropical diseases. Filariasis, for example, is one of the world's six most important tropical diseases as classified by the World Health Organization. Between 250 and 300 million people worldwide are afflicted with the parasites which are transmitted by blood-sucking insects and are responsible for diseases such as elephantiasis and onchocerciasis ("river blindness"). Primate studies may contribute to effective chemotherapeutic agents that can eradicate the parasites in the human population (11).

Leprosy

In 1982, the World Health Organization issued a warning that leprosy, which afflicts 15 million people worldwide, may increase in incidence as a result of the bacillus becoming resistant to dapsone, the most effective and inexpensive drug for the disease (67). A vaccine and new effective treatments are urgently needed and may be expedited by research with sooty mangabey monkeys that have been infected with leprosy. This primate model, the first for leprosy research, is based on the discovery in 1979 of a sooty mangabey infected with naturally occurring lepromatous leprosy, the most severe form of the disease. The monkey's illness advanced through stages almost identical to those occurring in human lepromatous leprosy. The disease was transmitted from this animal to other sooty mangabeys, and this species also proved vulnerable to transmission of leprosy from humans. It is a distinct research advantage that leprosy develops swiftly in the monkeys. Some have developed signs of the disease less than 6 months after inoculation. In humans, the incubation period can take many years (25).

Acquired Immune Deficiency Syndrome

Research with chimpanzees may prove to be one of the keys to understanding AIDS and developing treatments and a vaccine against the disease. Three scientific institutions have inoculated chimpanzees with the LAV and HTLV-3 retroviruses, the suspected infectious agents of AIDS, or with blood and other material from AIDS patients. Four months after inoculation with LAV virus, two chimpanzees developed antibodies against the virus and evidence of AIDS infection in viral isolation studies. In another study, two chimpanzees that received transfusions of human plasma from a patient with lymphadenopathy syndrome, a condition believed to be an early form of AIDS, showed evidence of infection with the HTLV-3 virus. The chimpanzee is thus far the only laboratory animal that has proved susceptible to the AIDS infectious agents (76, 121).

In addition, monkeys of the macaque species at two NIH primate research centers have developed a disorder that may be akin, but not identical, to AIDS in humans. The primate version, called simian acquired immunodeficiency syndrome (SAIDS), is characterized by severe immunosuppression, inflamed lymph glands, lymphoma, excessive weight loss, anemia, fever, diarrhea, and central nervous system disorders. It is a severe and usually fatal disease of macaques. A new type D retrovirus was detected in both groups of monkeys (19, 72, 73). Studies of SAIDS can contribute to our knowledge of human AIDS and other immunological disorders and possible methods of diagnosis and control.

Cancer

For decades it has been theorized that some human cancers arise from a disruption of the body's immune system or DNA replication of body cells by an infectious agent, either acting alone or in unison with other factors. Although conclusive proof of a connection between an infectious agent and cancer has not yet been found in humans, some intriguing evidence for its existence was discovered in research with primates. In studies with kidney cell cultures from squirrel monkeys, in a project unrelated to cancer virology, a herpesvirus was detected and isolated. The oncogenic properties of this new virus were demonstrated in subsequent studies in which marmosets and owl monkeys inoculated with the herpesvirus developed leukemia. Named *Herpesvirus saimiri*, this was the first herpesvirus proven oncogenic in primates and other mammals as well (49).

Herpesvirus saimiri, however, was not the first herpesvirus linked to cancer. In the early 1960s, when Burkett defined the human malignancy which today bears his name, Burkett's lymphoma, he suggested an infectious basis for this particular form of cancer. Studies by Epstein and his associates reported in 1964, uncovered the now-called Epstein-Barr herpesvirus (EBV). Although EBV has not yet been proven to cause human Burkett's lymphoma, cotton-topped marmosets and owl monkeys inoculated with EBV developed lymphomas (17, 49). The marmosets are being used by Epstein to test an experimental vaccine against EBV (82).

In the early 1970s, another herpesvirus was identified in primates. Named *Herpesvirus ateles*, this agent can induce malignant lymphoma in cotton-topped marmosets (49).

Endogenous infectious agents have been the focus of much research attention since the discovery of type C virus particles in the placentas of humans and primates. Type C viruses have been isolated from baboon tissue (41), and in studies with primates, various forms of this virus (Rouse sarcoma virus, feline sarcoma virus, and simian sarcoma virus) have been identified and found reproducibly tumorigenic in primates (107).

Chimpanzees are used in the development of monoclonal antibodies against certain forms of cancer, primarily those that arise from solid tumors. Because of the immunological similarities between humans and chimpanzees, monoclonal antibodies derived from chimpanzee material should be highly specific when used in laboratory diagnostic assay and may be found safe and effective when used in human treatment. The safety and effectiveness of murine monoclonal antibodies also are being tested in monkeys (42, 126).

The Brain

Primates are used by psychologists, anatomists, and physiologists to trace the development of memory and its intricate pathways in the brain (44), as well as to study motivational states such as hunger, thirst, sexual behavior, and emotion in relation to brain structures and their chemistry (117). Research on the primate brain at all life stages, from infancy to old age, is helping to explain the physiological basis of vision (140). There are several ongoing studies of the brain areas responsible for producing and using neurotransmitters that have been implicated in certain central nervous system degenerative diseases and behavioral pathologies (30, 84). Primates are often the final animal model for the development and testing of procedures and drugs that if proved safe and effective, can be applied to the treatment of human central nervous system disorders such as epilepsy and Parkinson's disease (68).

Vision

One of the most recent contributions of primate research to human clinical treatment has been the studies of Hubel and Wiesel (146). For more than 16 years, they studied the development and functioning of the visual system in monkeys and cats. The results of their research revealed that monkeys, and by implication humans, are not born with a fully developed visual cortex. The maturation of the connections between cells and the cells themselves depends on visual stimulation. If deprived of stimulation, as when an eyelid is occluded experimentally in a monkey or vision is impaired by a cataract in a child, changes occur in visual neurons in the brain and their connections. These abnormalities can seriously affect visual functioning. In contrast, the same type of visual deprivation did not affect the cortical cells of adult monkeys, apparently because they had passed the critical period of visual development.

The primate studies of Hubel and Wiesel also provided important information about the mechanisms of visual development, plasticity of the visual cortex, and the processes that govern the balance between different visual inputs which permit the cerebral cortex to integrate information. Competition and synchronization of inputs are important factors in forming and maintaining this balance. If these processes are disturbed early in life, the visual system may be permanently altered.

The studies for which Hubel and Wiesel received the Nobel Prize underlie the current emphasis on early diagnosis and treatment of human infants with eye disorders. However, the ideal age for treatment and the most effective therapies for congenital eye disorders are unknown and may eventually be determined, in a large degree, by current studies (personal communication, A. Gammon, Yerkes Primate Research Center, Emory University) with young primates. For example, postlensectomy treatment for congenital cataracts, one of the three leading causes of blindness in children, is under investigation at one of the NIH-sponsored primate centers. One experimental treatment involves the application of recently developed continuous-wear contact lenses, which are worn by young monkeys following lens removal, which is the equivalent of cataract surgery in children. Acuity and other visual capacities are measured to assess the efficacy and safety of different designs of continuous-wear contact lenses. Such lenses should prove an asset for very young children, in whom constant lens changing can be a difficult problem.

The development and evaluation of intraocular and intracorneal lenses for patients who have had cataract removals are also being conducted with primates (109). Within several years, these lenses will probably contain ultraviolet radiation-filtering agents because of primate studies showing that removal of the natural lens in cataract surgery leaves the retina vulnerable to damage from ultraviolet radiation (104). Other human visual disorders whose prevention and treatment are being studied in primates include uveitis, astigmatism resulting from corneal graft surgery, glaucoma, ocular hypertension, and presbyopia.

Split Brain

Primates were involved in the split brain studies of Sperry (128), who shared the 1981 Nobel Prize with Hubel and Wiesel. Sperry's studies with cats, primates, and human patients who had undergone commissurotomy for intractable epilepsy challenged the view of a subordinate, or minor, nonlanguage right hemisphere in contrast to a supposedly more highly evolved and intellectual left hemisphere. Sperry's animal work predicted in part the findings in humans that left-right hemisphere cognitive differences are subtle and qualitative and that each disconnected hemisphere behaves as if it is not conscious of cognitive events in the partner hemisphere. Each brain half, therefore, has its own largely separate cognitive domain with its own perception, learning, and memory experiences.

Movement Disorders

Primates are also employed to evaluate the structure and function of pathways known to participate in motor activities and to define the anatomical and biochemical relationships between the brain stem and the higher centers and their role in movement disorders. Experimental brain lesions have been used to produce a Parkinsonian tremor and to isolate and define components of the motor system which are involved in this disease and others which impair motor activity. Scientists have determined with primate and other animal models that central feedback loops play important roles in the control of movement and that abnormalities in these loops are responsible for certain tremor disorders. A primate model of tardive dyskinesia in humans also has been developed in primates by the chronic administration of haloperidol, believed to block dopaminergic transmission and to affect the cerebellar pathways (51).

Alzheimer's and Parkinson's Diseases

Primates also are used in studies on Alzheimer's disease, a devastating and irreversible form of dementia that affects 5% of the population over the age of 65 and half of those over 80. To a lesser degree younger people are also afflicted. Studies with primates and other laboratory animals have implicated the nucleus basalis of Meynert as the brain region that is critical in the development of Alzheimer's disease (58). Autopsy findings on Alzheimer's patients confirmed the animal studies and showed that ~75% of the neurons of the nucleus basalis are lost in patients with the disease (145).

Primate research also has explained a pathological feature of Alzheimer's: the abundance of neuritic plaques or clusters of nerve endings surrounding a core of extracellular amyloid, in the cerebral cortex. Primate studies have revealed that these plaques consist partly of degenerating cholinergic axons arising from the nucleus basalis. By lesioning the basal forebrain cells of monkeys and evaluating the chemical and anatomical alterations, scientists are attempting to simulate the pathogenesis of Alzheimer's disease.

In 1981, the first animal model for research on Parkinson's disease was developed through the chronic administration of the chemical MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine). This compound produces many of the clinical and physiological features of human Parkinson's disease, including the loss of dopamine-producing brain cells. Primates injected with this substance are being used to test the safety and efficacy of surgical transplants of donor dopamine-producing tissue, such as adrenal medulla tissue or fetal substantia nigra tissue. The primate model for Parkinson's disease is also being used to investigate the disorder's "on-off" effects and to test experimental drugs (68).

Reproduction

Today, many primate species are endangered in their natural habitats because of the ever-increasing demand for land and raw materials created by the human population explosion. Basic research on primate reproductive biology in the interest of both humans and the primates is urgent. The development and testing of improved fertility control methods depend to a significant extent on the results of research on the reproductive functioning of primates as models for humans (39). Laboratory and field studies on primate reproductive biology and behavior provide information needed for zoos and research centers to design captive breeding programs. Captive propagation and conservation of natural habitats will also help prevent the extinction of these animals.

Basic reproductive research with primates is focused on areas such as hormonal and other biological mechanisms responsible for ovulation, steroid feedback events governing gonadotropin secretion (53), adrenarche, puberty, and adolescence (35), sperm maturation and transport (53), embryonic and fetal development (46), fetal exemption from the maternal immune response, and the onset of labor (21). Results of these basic research studies are applied to clinical areas such as fertility control (39), correction of infertility (97), teratologic testing, in vitro fertilization, and embryo transfer, correction of fetal disorders in utero (45), prevention of asphyxia in newborns (personal communication, Dr. A. Patterson, Yerkes Primate Research Center, Emory University), treatment of premature labor (110), hyaline membrane disease (101), and respiratory distress syndrome (52, 148).

Fertility Control

Several new approaches to female fertility control currently being tested in primates include nasal spray compounds (64), active and passive immunization against either the β-subunit of human chorionic gonadotropin, luteinizing releasing hormone, zona antigens, or epididymal fluid proteins (39, 40, 130), steroidal anti-implantation agents (39), novel steroid combinations, and nonhormonal cervical mucus modifiers (32, 86).

While antiandrogens (92), gossypol (125), and other potential contraceptive agents for human males are being investigated in primates, the ideal male birth control method may depend on the results of current research on the basic mechanisms of spermatogenesis. These studies may identify the steps in the male reproductive process that can be safely and effectively interrupted for long-term reversible fertility control (39).

Without similar basic research studies, the female fertility control methods that are currently used or under study could not have been developed. The experimental nasal spray contraceptives are based on research first conducted in lactating rats and then monkeys, demonstrating that amenorrhea can be significantly extended by increasing endogenous prolactin secretion. Primates were later used to test the intranasal route of steroid administration as a way to deliver minimal, but effective, concentrations of steroids that boost endogenous serum prolactin levels. Preliminary studies indicated that the steroids enter the cerebrospinal fluid when sprayed intranasally and the dosage required is less than that needed to block ovulation by conventional routes of drug administration (64).

Basic research also underlies a new nonhormonal approach to fertility control based on the monthly cyclic changes that characterize both human and primate cervical mucus. During much of the cycle, these secretions are an effective block to sperm transport. At midcycle, the structure and chemical nature of these secretions change in a manner that permits the passage of sperm into the reproductive tract. A method for the manipulation of cervical mucus secretions so that they continuously block sperm passage has been achieved in primates. However, the delivery system for the chemicals known to maintain this state remains to be developed. Although the human application of this new and unique fertility control method is still to occur, the same approach to cervical mucus manipulation is now being used to achieve fertility in women, who for a variety of reasons, have cervical mucus which blocks the passage of sperm even at midcycle (32, 86).

Studies of the neuroendocrine system of primates should identify causes and ways of correcting infertility. For example, research on the role of gonadotropin in stimulating ovulation in primates has revealed that this hormone is not secreted steadily but is released in bursts of approximately one per hour. A treatment regimen which mimics secretory pattern will induce ovulation in monkeys that have not ovulated. Based on this research, portable minipumps that are implanted under the skin to administer the hormone at regular intervals are being used in the treatment of human infertility (79, 97).

In Vitro Fertilization

As a solution to female infertility caused by impaired fallopian tubes, in vitro fertilization has received great public attention. Extensive in vitro fertilization research with primates followed the first birth of a human from a laboratory fertilized egg. Several scientific laboratories are studying in vitro fertilization in the chimpanzee, rhesus monkey, baboon, and squirrel monkey (21). Pregnancies have resulted from in vitro fertilization in the rhesus and the baboon, and the offspring were born to surrogate mothers (24, 120). These various in vitro fertilization studies should improve the technique so that it will have a higher frequency of success in humans. Primate models for in vitro fertilization will also be used to study the developing embryo and evaluate the effects of drugs and other environmental agents on the embryo and the processes of cellular differentiation (102). These are areas in which research is badly needed and cannot be conducted in human embryos.

Alternatives to in vitro fertilization have been developed in primate research studies. These include low tubal transfer of eggs which are collected before ovulation and placed back into the fallopian tube below the point of blockage and surrogate embryo transfer in which the embryo is taken from the donor and transferred to the reproductive tract of the infertile female. Low tubal transfer can benefit women who have partially normal fallopian tubes, and surrogate embryo transfer is designed for women without ovaries and tubes (103).

Pregnancy and Development

Pregnancy and fetal development are studied in primates, since they rarely can be investigated directly in humans. Because their placentas are as permeable to glucocorticoids as those of humans (85), primates are models for fetal and neonatal respiratory distress syndrome, the dynamics of amniotic fluid, and the possibly beneficial effects of glucocorticoids. These and other structural and functional similarities to humans make primates invaluable in research on the regulation of uteroplacental blood flow and the use of amniotic fluid sampling as an index of the hormonal milieu of the fetus. Primates are also being studied to determine the relative roles of maternal, placental, and fetal hormones on the progress and outcome of fetal hypothalamopituitary-gonadal development (46). The results of these studies will provide important information about fetal development and the role of prenatal influences on gender, reproductive development, and sexual behavior.

Fetal-placental and maternal interactions leading to parturition in primates are being examined in order to identify the factors governing the onset of labor in humans and the mechanisms responsible for premature labor (21). A serious problem that can occur during birth is asphyxia. The results of current studies on oxygen deprivation in fetal monkeys can improve the detection, prevention, and treatment of asphyxia and related human disorders, which include cerebral palsy (personal communication, Dr. A. Patterson, Yerkes Primate Research Center, Emory University).

Studies with primates also provide relevant information about the processes that initiate and govern the maturation of the reproductive endocrine system from early fetal life through puberty. Of particular interest is adrenarche, the human prepubertal stage characterized by activation of the adrenal cortex. Research with apes, the only animals in which adrenarche is known to occur, should contribute to our scientific understanding of normal sexual maturation and mechanisms responsible for abnormal sexual development (35).

Teratology

Teratological studies often involve monkeys, particularly if the test agent has low levels of teratogenicity in common laboratory animals such as rodents, has unique properties which indicate that additional evaluation is needed, or may be used during pregnancy or before pregnancy is recognized (141). Although experimental studies in mammalian teratology began in the 1920s, it was not until the thalidomide tragedy of the late 1950s and early 1960s that the value of proper teratological screening was widely realized. If thalidomide had been properly tested in pregnant monkeys, its potential for causing limb and other deformities in the fetus would have been recognized at once, and it probably would never have been given to pregnant human females (20, 43).

Intrauterine Surgery

As a result of primate research, medical science has embarked on a new frontier—the diagnosis and correction of hydrocephalus and other neural tube disorders in the fetus. Techniques for intrauterine surgery for humans were developed in pregnant monkeys, and the success of these studies now enables clinicians to correct hydrocephalus in utero, so that human infants will have a chance for a normal life. Primates also are models for intrauterine correction of spina bifida and encephaloceles (38, 45, 59).

Respiratory Distress Syndrome

To prevent respiratory distress syndrome in premature infants, physicians administer corticosteroid hormones prenatally to the mother. Research with primates suggests that the dosages currently used in human treatment may not be sufficient to stimulate complete maturation of the human fetal lung. Other primate studies have shown that dexamethasone, a corticosteroid, can produce severe brain changes in fetal rhesus monkeys whose mothers were given various dosages of the drug late in gestation. The neurological changes in treated fetuses are being investigated, and the results should provide information guidelines for clinical use of dexamethasone in human patients (148).

Surgery and Dentistry

In 1981, a middle-aged woman dying from cardiopulmonary hypertension underwent a heart and lung transplant. The operation, the first of its kind on a human patient, was a success. Since then, other patients have received heart and lung transplants, which were tested in primates prior to their application in humans.

With the development of drugs and other treatments to prevent or reduce graft-vs.-host disease, the number of organ transplant surgeries is expected to increase. Primates are being used to evaluate possible approaches to immunosuppression of organ transplants. These include lymphoid irradiation (37), platelet transfusions (87), and injections of monoclonal antibodies directed against antigens expressed on subsets of lymphocytes (3). The results of primate studies with monoclonal antibodies are promising. For example, a monoclonal antibody directed against an antigen (T3) common to all peripheral T-lymphocytes can reverse acute graft rejection in monkeys with kidney transplants. Monoclonal antibody treatment effectively removed T3 positive cells from the animals' circulation. When monoclonal antibodies against T4 cells were injected into monkeys, T4 positive cells decreased significantly in the circulation and kidney graft survival improved (54).

Experimental ophthalmic surgery also uses primates. Epikeratophakia, the insertion of donor corneas into the eyes of human cataract patients, was refined in research on several monkey species. The implanted corneas become living contact lenses. Monkeys also are used in the development and testing of refractive keratoplasty, in which a hydrogel lens is implanted within the layers of the cornea to alter its curvature and improve the vision of cataract patients who have had the natural lens removed. Although human corneas are the preferred biological implant, they are not as widely available as hydrogel lenses and cannot be as easily cut and custom-sized for the patient (personal communication, Dr. B. McCarey, Yerkes Primate Research Center, Emory University).

Studies also have been conducted in primates to determine the optimum extent and the proper timing of vitrectomy in the treatment of penetrating injuries in the posterior area of the eye (36, 158). In addition, primates were used to evaluate laser surgery for repairing and restoring function to damaged nerves (26).

Dental research uses primates to develop and test new surgical approaches and ways of preventing and treating disease. Synthetic dental implants that serve as anchors for removable dentures and fixed teeth were tested and shown safe and effective in primates (122). Primates also are involved in the development and testing of artificial tooth implants (personal communication, Dr. M. Spector, Yerkes Primate Research Center, Emory University) and are used in research on the effects of immunoregulating drugs (62) on periodontal disease and subgingival microflora, various vaccine preparations to prevent caries caused by streptococcus mutants (66), and vitamin C (2) as a preventive and treatment for root surface caries and periodontal disease.

Environmental Health

Primates are used to assess the health consequences to humans exposed to various environmental agents such as ozone. Low levels of ozone, the most damaging pollutant in photochemical smog, caused slight but obvious damage to the small airways of the lungs of three species of monkeys. Exposure to large amounts of ozone caused lung inflammation and fibrosis and immunological changes that can increase allergic reactions and asthma-related problems.

Studies with monkeys also have shown that the cells lining the lung can adapt to low concentrations of ozone. Long-term research is being conducted on ozone exposure to determine the relationship between the ongoing rate of damage and cumulative damage at various intervals of exposure. The research results should help establish safe air-quality standards and help clinicians devise therapies to evaluate and reverse the effects of smog (12, 69).

Both humans and animals have been accidentally poisoned by polychlorinated biphenyls (PCBs) and Dioxin. Although PCBs are no longer manufactured in the United States, they were used for decades as heat-transfer agents and insulators in electrical equipment. They are widespread in the environment also, because disposal practices for PCBs were often careless. The highly toxic and carcinogenic Dioxins are still entering the environment as contaminants in pesticides and herbicides and in the effluents from municipal incinerators.

Exposure to PCBs and Dioxins produces similar effects in humans and primates. Therefore, monkeys are being used to study the effects of these agents and the mechanisms of their toxicity. More information about the storage and metabolism of PCBs and Dioxin is necessary in order to develop appropriate therapy for those who are poisoned (98).

As a result of medical and public concern, a 6-year study was conducted on the effects of microwave radiation. No cataracts or other harmful health effects were evident in the monkeys exposed to intermittent intense microwaves of a 10,000-MHz frequency. The results of this study are important because many persons are exposed to microwave and lower frequency radiation (100).

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LETTER FROM SHELDON HACKNEY, UNIVERSITY OF PENNSYLVANIA

As you may know, the Head Injury Clinical Research laboratory at the University of Pennsylvania has been the subject of controversy over the use of animals in biomedical research to improve human health. As President of the University, I am writing to address several issues which may have come to your attention regarding this controversy and to describe efforts we are undertaking to further engage these issues.

This controversy should be seen in recent historical context. Last May, unknown members of a group, self-described as the "Animal Liberation Front", broke into the Head Injury Research lab, destroyed equipment and records, and stole videotapes documenting 60 hours of experiments. A short time after the break-in, representatives of People for the Ethical Treatment of Animals (PETA) announced that that organization had copies of all 60 hours of the stolen videotapes. The Philadelphia District Attorney has attempted to identify and prosecute those involved in the break-in.

The purpose of the experiments conducted in the vandalized laboratory is to develop a model to determine the specific mechanisms of brain injury, in order to help understand and develop treatment for brain injury in humans. Head injury due to automobile and similar accidents, affecting 400,000 Americans annually, is among the most prevalent causes of death and disability in the United States, and severe head injury is currently fatal to four out of ten victims. As you know, the development of a successful treatment for a complex medical problem usually requires an intimate knowledge of the problem itself. The creation of a model for head injuries in primates, whose brain structure is closest to that of humans, helps develop such knowledge about severe, often irreversible brain damage due to injury in humans. I should add that the researchers most closely involved with the head injury research clinic are first and foremost neurosurgeons who are primarily engaged in treating human brain-injured patients, and who have gained considerable knowledge about the human brain from their research on primates.

In order to respond fully to accusations leveled against the research and the investigators involved, the University has attempted to secure the return of the full 60 hours of videotapes. PETA has refused to return the tapes to the University but released brief and selected portions of the tapes to the news media, and produced a 24-minute version which has been widely shown and which PETA alleges to document experiments conducted over a ten year period. Such a brief and selectively edited version cannot represent accurately and fairly the full videotaped documentation, and our own review of the research has been impeded by the continued refusal of PETA to make all the stolen tapes available.

Recently, PETA has made available to the U.S. Department of Agriculture five videotape cassettes. These cassettes appear to represent only a small fraction of the 60 hours of stolen tape.

Nevertheless, with the anticipated availability of this somewhat larger portion of the videotaped record, and acknowledging PETA's complete unwillingness to provide, after countless requests, the complete tapes for us to review, the University has appointed a special committee to review the research conducted by the Head Injury Clinical Research Laboratory. This committee will consist of University faculty and of prominent individuals from outside the University who are conversant with bioethical and research issues. Representatives of the National Institutes of Health and the U.S. Department of Agriculture will be invited to participate as observers. The committee will conduct a complete evaluation of the laboratory and its research, including a review of the allegations of improper procedure raised by antivivisection groups.

Let me add that there have been no such allegations raised by the Federal authority duly constituted to have jurisdiction over this research - the National Institutes of Health. Indeed, NIH has continued, through the peer review process, to designate the research as exceptionally worthy of support.

The most recent favorable NIH peer review took place in February of this year. Furthermore, the NIH Office of Protection from Research Risks is continuing to review the research to determine compliance with NIH policies regarding the care and use of laboratory animals.

Another issue which has been raised, separate from the specific research activities of the head injury research clinic, concerns the compliance of Penn's animal care facilities with regulations under the Animal Welfare Act. The University has worked closely with the USDA, which has jurisdiction over animal welfare standards, to promote compliance. When the USDA has suggested methods for enhancing compliance with regulations, we have endeavored to correct any real or potential problems. Since the break-in, our animal care facilities have been inspected many times by the USDA. A February 1985 inspection found problems raised by earlier inspections to have been basically corrected.

Let me take this opportunity to address certain of the broader issues involving the use of animal subjects in biomedical research. I believe firmly that the research of this or any other University must be conducted according to the highest ethical and moral standards. Such standards dictate that research involving animal subjects be performed humanely. I believe strongly, however, that basic biomedical research involving animal subjects is absolutely necessary if we are to continue to conquer disease and improve the health of our people. This is not simply an imperative of the research community, but clearly reflects the popular will for continued biomedical advances, a will which is translated by Congress into support for biomedical research. Advances in the treatment of cancer, diabetes, lung and heart disease, and spinal cord injury have all been accomplished through procedures involving animals, and we will need to continue to involve animal subjects in many areas of research, including head injury research, if further advances are to be made.

There is, of course, a small but extremely vocal minority which disagrees with this premise, and whose purpose is to eliminate all research involving animals, regardless of the benefits to man. This extreme minority attempts, through misrepresentation and innuendo, to impose its will on a society which has made the complex and difficult choice that the greater good - to maintain and improve the health of humans and animals - is served by such research.

I hope that this discussion has been useful in your consideration of this important issue. I would be pleased to keep you informed as to the progress of the review of the research as it proceeds, and you may be assured that the proper conduct of the review has my highest priority.

Sincerely,

Sheldon Hackney

Sheldon Hackney

THE EXPERIMENTAL HEAD INJURY LABORATORY

The Experimental Head Injury Laboratory at the University of Pennsylvania has been conducting research into the nature of serious, often fatal, brain injury. Although the research is done in a number of ways, including the use of computer and mechanical brain models, it has been necessary to conduct experiments on primates. What follows is an explanation and description of that research, including answers to the most frequently asked questions about it.

Why were the experiments performed?

The primate experiments were performed to develop a better understanding of the complex problems that are associated with brain injury. This is necessary because brain injuries are a major health problem in the United States today. The problem of head injuries is widespread and involves injuries caused by automobile accidents and falls.

Statistics obtained from the National Safety Council and other sources are given below and demonstrate the magnitude and importance of head injuries in the United States today.

Each year in the United States:

-- There are more than 1.9 million people with head injuries
-- 400,000 people are hospitalized because of head injuries
-- 40,000 to 60,000 people die from head injuries
-- Head injuries account for 1 to 2% of all deaths
-- Head injuries are the leading cause of epilepsy
-- 1/4 to 1/3 of all trauma deaths are from head injuries
-- Head injuries cause 50 to 60% of vehicular trauma deaths
-- Head injuries require 3.5 million days of hospitalization
-- 35,500 man-years of work are lost because of head injuries
-- Head injuries cost $25,000,000,000

Stated another way:

-- A head injury occurs every 16 seconds in the United States
-- Someone dies of a head injury every 12 minutes
-- Head injuries cost $800 per second, $48,000 per min., or $2,880,000 per hour
-- 1 out of 80 children born today will die of a vehicular induced head injury, probably before reaching 25 years of age

In addition:

-- Since 1900, between 2 and 4 million Americans have died from head injuries
-- Since 1970, from 350,000 to 550,000 people have died from head injuries
-- In comparison, Americans have suffered 653,000 battle deaths in all the wars that we have fought
-- Trauma is the leading cause of death from age 1 to age 45 and in children, it causes more deaths than all diseases combined
-- The leading causes of death in 1900 have now been reduced by 99% while the death rate from vehicular injury has increased by 7 times

Trauma and head injuries are therefore extremely important unsolved medical problems in the United States. They are the fourth leading cause of death, but because they affect so many young people, they are the most important cause of loss to the American society, in terms of dollar cost, in terms of loss of productivity, and in terms of loss of the potential of our youth.

Methods to solve the problems of brain injuries:

Because the problem of brain injuries is so large, because the brain is so complex, and because there are many different kinds of brain injuries, the solutions to the problem of head injuries are very complex. No single method will achieve all of the answers necessary for solving the problems. In general, two major efforts are necessary: we must 1) prevent head injuries from occuring and 2) improve the treatment of head injuries after they occur.

Head Injury Prevention:

To prevent head injuries, we first must know the various types of injuries and then concentrate on the ones that cause death and disability. An understanding of what causes each of the important injuries is required, and this means that we must define the dose of trauma and the mechanism of injury for each of the many types of head injuries. Then, once the mechanism of the injury is known, steps can be taken to prevent that injury. It is this piece of the puzzle that cannot be fully answered by studying humans. From human patients we can determine the general types of events that cause brain injuries such as falls and car crashes. However, it is impossible to get the specific detail that is necessary to prevent them.

One of the purposes of primate head injury research is to define the specific types of injury forces that cause the different kinds of head injuries and to determine the amount of trauma necessary to cause injury. Then, it will be possible to prevent the trauma from reaching the person or to reduce the dose of trauma that reaches the person so that it is within tolerable levels.

Improving Head Injury Treatment:

The treatment of head injuries has been a subject of interest to neurosurgeons for many many years and has evolved to a highly specialized science. Advances in diagnosis, surgical techniques, and treatment have allowed many patients to survive who otherwise would have died. Because there are still approximately 50,000 people who die from head injuries each year, more advances are necessary to improve treatment further. Some of these advances will include better emergency medical systems so that diagnosis and treatment can begin as rapidly as possible. However, this is not the total answer. New treatments must be developed, and the treatments must be both safe and effective.

Some treatments can be tried directly on human patients, but because of the complexity of the brain and the brain's reaction to injury, it often cannot be determined whether a treatment is working or not. Furthermore, what may appear to work in one patient may be totally ineffective in another patient. Finally, some treatments cannot be used first on humans because they may cause more problems than they cure.

For these reasons, models of head injuries are necessary. The models must involve a brain that is similar to the brain of a human and the brain must be injured. Since primates are man's closest animal relatives, the primate brain is closest to the human brain in its structure and function.

To summarize, the animal experiments at the Experimental Head Injury Laboratory are performed to further the scientific understanding of brain injuries, a serious health problem in the United States. The experiments are necessary because certain types of information cannot be obtained from human beings and primates are utilized because their brain structure is closest to that of man. The purpose of the experiments is to determine the specific mechanisms of injury and to determine the amount of trauma necessary to cause injury; these factors relate to the prevention of head injuries in humans. Other aspects of the experiments involve developing better treatments. For this, a living brain, as close to the human brain as possible, is necessary. This allows the brain to be studied in ways that cannot be used in human patients and allows treatment trials to be made to determine the effectiveness and safety of new treatments.

How were the experiments performed?

There are two basic ways that the brain is injured after trauma. The brain can be injured as a direct result of something striking the head or the brain can be injured by the manner in which the head moves during the injury. The first mechanism is called contact injury and results in one group of head injuries such as skull fracture and bruises. An entirely different type of brain injury is caused by the second injury mechanism, namely the way the head moves during injury. This category of injuries is called acceleration-deceleration injuries and consists of such injuries as cerebral concussion, subdural hematoma, and prolonged traumatic coma. It has been established that the last two head injuries are the most important causes of death and disability, and consequently, these have been the focus of our experimental head injury investigations. However, cerebral concussion, although it causes few deaths, is an important cause of loss of work and disability since more than 2 million people a year suffer post-concussion symptoms.

Since the injuries of greatest interest (concussion, subdural hematoma and prolonged coma) are all caused by acceleration and not by something striking the head, the experimental conditions used in this laboratory have been developed to avoid any objects striking the head. There is no hammer-like effect that strikes the head; rather, the head is moved rapidly in a very precise manner and amount so that acceleration and deceleration forces are applied without impact.

In order to accomplish this very specific type of injury mechanism, the injury-producing system has evolved considerably over the past several years. The following represents a capsule of our current process.

Animals are purchased from a conventional primate supply facility, Primate Imports Inc. They are shipped to the University, where they are examined and quarantined and cared for by the veterinary staff of the Division of Laboratory Animal Medicine headed by Dr. Moshe Shalev. On the day of the experiment the animals are anesthetized with a general anesthetic agent, sernalyn. This anesthetic is called a dissociative anesthetic because it renders the animals incapable of feeling pain but does not render them comatose as other anesthetics do. This is necessary so that observations of the neurological state of the animal can be made even though the animal is anesthetized. Thus the animals will be able to move their arms and legs and will have their eyes open and look as if they are dazed. They are, however, unable to feel pain.

A breathing tube is placed in the animal's trachea to assure adequate respiration and ventilation. The animal is then temporarily rendered comatose by deep anesthesia with nitrous oxide so that it does not move when placed into the injury apparatus. This very deep anesthasia prevents movements as the head of the animal is coupled to the head accelerating device with a plaster-of-paris-like material. Early in the experiments, the skin would stick to the plaster of paris and had to be separated from it by chipping the plaster of paris away with a hammer and chisel. While this procedure caused no harm to the animal, new methods have been developed in the past year to prevent the head from sticking to the plaster of paris.

After the plaster of paris solidifies, the injury machine is programmed to deliver a specific dose of trauma, and the head is placed within the machine so that it moves in exactly the path that is desired. The machine is designed to limit the head motion to approximately three inches and does not cause any neck injuries. In all of the experiments performed, including those that go back more than ten years, no neck injury has ever occurred.

The injury itself is caused by moving the head very rapidly, in approximately 1/100th of a second. The head is moved without striking or impacting it. This is done in a manner that is most like grabbing the head with both hands and rapidly thrusting it 3 inches. There, nothing strikes the head, but the head nonetheless is moved quite rapidly. This maneuver causes instantaneous coma, a condition where no pain can be felt, and thus even if no anesthesia were used, the animal would be incapable of feeling pain.

These experimental procedures, their scientific merit and the manner of animal care have been reviewed and monitored repeatedly by scientists within and outside of the University. Reviewers have found that the experiments are appropriately performed, humane and of great scientific and medical importance. The National Institute of Health (NINCDS) has therefore funded this work as the only laboratory in the country to study acceleration head injury in the primate.

Most of our current experiments involve studies that terminate the animal shortly after injury, while it is still comatose and incapable of responding to pain. The animals are terminated by re-anesthetizing them into a deep level of anesthesia, even though they are incapable of feeling pain while comatose, and then giving them medications which stop the heart beat suddenly.

In some experiments it is necessary to keep animals alive for several hours or days. These animals are cared for in exactly the manner as our human head-injured patients. An animal intensive care unit has been developed specifically for this purpose and is staffed by a team of personnel representing the following medical specialities: neurosurgery, anesthesiology, critical care nursing, physical medicine and rehabilitation, physical therapy, and nutrition. That the animals can survive while comatose for prolonged periods of time is a tribute to the dedication of this team and to the high quality care delivered to the animals. This staff is highly dedicated to this project, to the care of these animals and to their humane treatment. Statements, taken out of context, may sometimes appear otherwise, but careful review of the past year will demonstrate that the current members of the team conduct themselves in the most serious professional manner possible. That any necessary operating procedures have been performed in a sanitary fashion is noted by the absence of any surgical infections in the animals.

Why use animals at all?

Some animal rights protagonists have argued that these and other similar experiments are absolutely unnecessary since all information could be obtained from humans. This proposition reflects a scientific naivete. Head injuries have been around for a long time and the solution to them has been sought for many centuries. Although some information can be gained from studying humans, both from brain injured patients and autopsies, there is much information that cannot be gained from these types of studies. For example, it is vital to be able to observe the exact cause of an injury and the subject's condition immediately afterwards. Even if researchers accompanied ambulances to crash scenes, they would still be too late to gather this kind of information.

The Head Injury Center at the University of Pennsylvania is actively involved in other investigative work in trying to solve the problem of head injuries. Clearly neither human studies nor animal studies can provide the total solution to this very complex problem. We have therefore undertaken other types of models of head injury using gelatin models of the brain and other species of animals including frog, squid, crayfish, and rat. We employ mathematical and computer models of the brain injury situation as well. A portion of this non-primate work is funded by the National Highway Safety Traffic Administration.

Each of these activities plays a role in trying better to develop an understanding of how the brain is injured and how it can be treated after injury. No single piece of this complex puzzle, in itself, will provide us with all of the answers. It is only by using all of the facilities available and many models that we can hope to achieve our goal of reducing the tragedy of head injuries in this country.

STATEMENT OF RONALD DUNCAN HUNT, D.V.M., PROFESSOR OF COMPARATIVE PATHOLOGY AND DIRECTOR, NEW ENGLAND REGIONAL PRIMATE RESEARCH CENTER, HARVARD MEDICAL SCHOOL

I am Dr. Ronald D. Hunt, Professor of Comparative Pathology at the Harvard Medical School and Director of the New England Regional Primate Research Center. I am here representing the seven Regional Primate Research Centers located across the Nation.

Most everyone supports medical research. It's not a philosophical issue. It is not a political issue. Our country's medical research program, largely funded by the National Institutes of Health through appropriations made by this Committee has been and remains highly successful. You can't argue against this success and its benefit to the people's health.

Our nation's Primate Research Centers program has shared in this success. Using the unique characteristics of non-human primates, research at the national primate centers has contributed to our knowledge and understanding of cardiovascular disease, diabetes, cancer, herpesvirus infections, sickle cell anemia, malaria, blindness, nutrition, hepatitis and drug addiction, to mention but a few. I have shared details on several of these accomplishments with this Committee in the past.

Today I will briefly comment on studies currently in progress at several primate centers, including my own, on Acquired Immunodeficiency Syndrome or AIDS. As we all know, AIDS is a most devastating disease, and all evidence indicates its full impact is yet to be realized. Scientists at my Center recognized a similar disease entity in monkeys, which was subsequently identified at other centers and laboratories. The syndrome is remarkably similar to AIDS, characterized by severe immunosuppression and death due to opportunitistic infections.

In April of this year we announced at the international AIDS meetings in Atlanta, Georgia the discovery of a virus similar to HTLV III, the cause of human AIDS. We have termed this virus STLV-III (S = simian). This finding may pave the way for animal studies designed to assist in the development of a vaccine for human beings. Indeed, vaccine development may very well depend upon the Primate Research Centers program.

In addition to their own research programs, the Centers also provide a unique and very important role as resources for the entire biomedical community. At my Center alone, there are presently 135 investigators from 43 institutions conducting independent or collaborative research at the Center. These include The Rockefeller University, Tulane University, Brown University, Yale University Medical School, the University of Connecticut, The E. K. Shriver Center, the Centers for Disease Control (Atlanta), the University of California at Davis and at Los Angeles, University of Erlangen (Germany),Dana-Farber Cancer Institute, Boston Veterans Administration, Brandeis University, Case Western Reserve Medical School, Stanford University and the University of New Hampshire.

Owing to maneuvers of our federal administration, the Primate Centers

Program budget for the coming fiscal year has been reduced from the current year's level. Any reduction for a small program is serious, but we will manage to survive. However, the 1986 budgetary request is more than three million dollars less than the current appropriation (($19,200,000 vs $22,398,000) See attachment). A reduction of this magnitude (over 14%) will jeopardize the entire program, affecting important biomedical research programs of all the categorical institutes of the N.I.H.

I ask the Committee to carefully review appropriations to the Primate Centers Program (a component of the laboratory animal sciences and primate research budget of the Division of Research Resources) and restore our budget to the current level with some allowance for inflation. Two years ago, this Committee initiated a renovation program for the Centers by adding 1 million dollars to the Center's annual budget. I would urge the Committee also review and hopefully continue this program. I remind the Committee that the Centers appropriation covers all costs, to include heat, light, administration and so forth. Further, the appropriation has been well below that established by the N.I.H. through peer review.

To meet these past and current deficiencies, maintain the program and allow for continuation of renovation, I request the Committee appropriate a budget of $26,877,600, rather than an appropriation with a 14% reduction as in the 1986 request. Even at this request, the appropriation will be more than $3 million below the authorized level.

This is a modest request and a small cost both to preserve the investment we have already made and continue a most productive and successful biomedical research program.

This Committee may also be aware that this session of Congress is seriously considering an amendment to the N.I.H. re-authorization bill which would establish an eighth Regional Primate Research Center in New York. I urge this Committee to include in the appropriation language that this action will not occur at the expense of the existing Centers. We must protect the medical research program of the existing seven Centers and not allow the establishment of an additional Center to erode the Primate Centers budget.

Attachment: 1986 Division of Research Resources "Budget Authority by Activities"

Division of Research Resources

Budget Authority by Activity

(Dollars in Thousands)

	1984 Budget Authority	1985		1986 Request	1986 Authorized Ceiling
		Appropriation	Current Estimate 1/		
Clinical research........	$ 81,680	$ 89,078	$ 83,657	$ 78,236	
(Centers)...............	(80,749)	(88,096)	(82,675)	(77,254)	
(Other research).......	(866)	(917)	(917)	(917)	
(Contracts)............	(65)	(65)	(65)	(65)	
Biomedical research technology..............	33,434	43,433	35,207	26,975	
(Centers)...............	(26,348)	(34,962)	(26,736)	(18,504)	
(Other research).......	(5,044)	(4,225)	(4,225)	(4,225)	
(Contracts)............	(2,042)	(4,246)	(4,246)	(4,246)	
Laboratory animal sciences and primate research...	32,157	43,363	38,381	28,399	
(Primate research ctrs)	(22,361)	(24,261)	(22,398)	(19,200)	(30,000)
(LAS centers)..........	(6,392)	(7,515)	(7,265)	(5,481)	
(Biological models & materials development)	(---)	(500)	(---)	(---)	
(Animal facilities improvement).........	(---)	(7,369)	(5,000)	(---)	
(Other research).......	(1,974)	(1,273)	(1,273)	(1,273)	
(Research training)....	(708)	(1,075)	(1,075)	(1,075)	
(Contracts)............	(722)	(1,370)	(1,370)	(1,370)	
Biomedical research support..................	67,897	96,335	96,335	96,335	
(BRSG formula).........	(47,127)	(63,007)	(63,007)	(63,007)	
(SIG)..................	(19,771)	(31,828)	(31,828)	(31,828)	
(MHSSA)................	(999)	(1,500)	(1,500)	(1,500)	
Minority biomedical research support.......	21,879	24,951	24,951	24,951	
(MBRS).................	(20,879)	(23,951)	(23,951)	(23,951)	
(Instrumentation)......	(1,000)	(1,000)	(1,000)	(1,000)	
Research management and support................	7,930	8,665	8,244	8,144	
Subtotal, DRR..........	244,977	305,825	286,775	263,040	
Two-year centers.........	---	---	18,629	---	
Total, DRR........	244,977	305,825	305,404	263,040	

1/ Includes Deficit Reduction Act (Section 2901) proposed rescission of $250,000; and a reduction of $171,000 as a result of Section 515 of the Treasury-Postal Service Appropriations Act, 1985.

STATEMENT OF THE COMMITTEE FOR HUMANE LEGISLATION FRIENDS OF ANIMALS, INC.

The improved health of the citizens of the United States is of concern to all of us, and is no less so for those of us concerned for animal protection. Our interest in animals is often seen as an indictment of all research and the canned response to our concern is that the health of Americans will suffer if Congress declines to grant funding for N.I.H. conducted or sponsored research.

The facts are, however, that although the research community will lose money is some areas of research if Congress looks more closely at where our money is being spent, worthwhile projects will have an increased chance of funding, animals will be spared and the American public will be more likely to have their health problems addressed at a greatly reduced cost.

Research on animals is often depicted as an unpleasant task, but one which is necessary to save human lives. This is a gross generalization of modern research. In fact, much of the research which takes place on animals has at best only a tangential relationship to human health problems. If the goal of the research is to improve the human condition, this purpose could be better served in many cases by concentrating on humans and not other species, particularly in areas in which the animal is a poor model or humans are currently suffering and not receiving government aid. Recently, many scientists have joined those in the animal protection community in questioning the necessity and validity of many of the experiments which are routinely performed. Any experiment performed in a sloppy, unprofessional manner, no matter how noble the intended research goals, should not be condoned by Congress. Many experiments routinely performed on animals have been conducted for decades. The research has lead to duplicative results and little practical value to humans. Particularly suspect are experiments in the areas of behavior, drug and alcohol studies, and trauma and impact studies. The animal model is an inadequate substitute in these areas because human responses to these problems are the result of complex personal and environmental factors which other animals may not react to in the same way and in any event, are unable to describe for us. Often the sceintists themselves discuss their limited ability to extrapolate from an animal's response in a laboratory to the human experience. The result of expenditures in these areas has been a false sense that we are responsibly working toward a more healthy society simply by virtue of having spent money on these experiments.

The research continues to be conducted because people trained in animal research are dependant on grant monies from N.I.H. for the continued viability of their departments and the people who make decisions concerning grant requests are also trained on animal research. The scientists either conducting the research or reviewing the research , understandably, have a stake in perpetuating the system as it exists today despite increasing criticism. Congress can break this cycle by addressing the problems caused by federal funding to universities through research grants and the effect that this has both on the perpetuation of useless research and the inefficiency of this method of supporting higher education.

One example of the atrocious waste of taxpayer dollars is the Head Injury Clinic at the University of Pennsylvania. This research which has been widely criticized for the inhumane treatment of the animals as well as the worthless nature of the research itself, has cost the government over $13 million in the past 13 years. This year the Clinic has asked for an additional $1 million. The researchers' conduct during the experiments has been characterized as grossly unprofessional. They smoked during surgery, used unsterilized equipment and used crude instruments to remove helmets after inflicting purportedly precise injury to the baboon's head. Scientists have also criticized the methodology because the shape of the baboon's head is so unlike that of a human that the research has little practical value toward saving human lives.

The experience at the University of Pennsylvania is not an isolated case of grant mismanagement. Senator Spector of this committee recently investigated an experiment at American University which, although unrelated to the use of animals in research, exemplifies the silly waste of federal funds which is justified by the scientific community. Researchers are apparently unable to separate projects which have some reasonable likelihood of leading to benefits to our society in the most direct and cost effective method possible from those which have only theoretical applications.

Another example of research gone awry is the work of Dr. Sumoni of the Intramural Primate Center in Poolesville, Maryland. For over 15 years in Maryland and at the University of Wisconsin, he has separated newborn monkeys from their mothers as a model of human depression. This type of research was started in 1949 by Dr. Harry Harlow. Neuropsychologist Stephen Sabat, Ph.D. a spokesperson foo the Medical Research Modernization Committee, has reviewed the work of Dr. Suomi and stated " As a human being, I would think that it is better if a child has a mother around... I would assume that being separated from the mother and isolated would have drastic negative effects. I wouldn't have to experiment to find this out. Even though Harlow already did the experiments many times, monkeys are still being taken from their mothers..."

In other laboratories, scientists turn rats end over end until they go into shock, or are forced to swim for up to 12 days or sink to the bottom of a tank and drown; this to explain that human women react better to stress than do human men. Rats are made into alcoholics and drug addicts. They are taught helplessness through shock experiments. They are deprived of food and sleep and fed aspirin to help them with hangovers. These experiments are costing us hundreds of thousands of dollars. Common sense tells us that monitoring the outward signs of stress on a rat being forced to swim for 12 days or drown simply cannot be as beneficial to man as using that money to interview people in human stressful situations and extrapolating from that to the effects on their sex, their job type, or to society as a whole.

Perhaps, given unlimited resources and no ethical concerns, these experiments could be justified. In these strained economic times however, expenditures for these types of projects are inexcusable. We ask your consideration of whether the benefits gained from society could possibly be worth the cost of the thousands of people who, today, need government support for drug and mental health problems and are being denied this support because the money is being spent to study artificially induced animal drug and mental health problems. Because of the public's concern for these problems, we are throwing our money into research projects which are unlikely to provide us with solutions for the future. We are doing this at the expense of people who desperately need government help now and who could also provide insights for researchers to better help those afflicted in the future.

Much of the research performed under N.I.H. is invaluable. This research should not, however, be allowed to justify the gross waste of money which is expended for research in areas under increasing criticism for the value of the results of years of study. Animal research in the areas of behavior, drug and alcohol studies and trauma and impact studies should no longer be funded by the Federal Governement. We ask that this committee consider these suggestions when considering appropriations for N.I.H. for FY1986.

STATEMENT OF DR. JOE JOHNSON, JR., PRESIDENT, MINORITY BIOMEDICAL RESEARCH SUPPORT PROGRAM DIRECTOR'S ORGANIZATION

Mr. Chairman, members of the subcommittee, I'm Dr. Joe Johnson, Assistant Chancellor for Scientific Research and Development, and Director of the Dolphus E. Milligan Science Research Institute at Atlanta University Center. I am also the President of the Minority Biomedical Research Support (MBRS) Program

Director's Organization. It is in this capacity that I address the committee.

Thank you for the opportunity to present some concerns and recommendations regarding the Administration's budget package and the proposed FY 1986 budget estimates for the National Institutes of Health, particularly the budget proposals for the Division of Research Resources. For the purposes of this testimony, we will summarize our major concepts regarding the budget package and offer recommendations for amendments on behalf of NIH. We will follow with our views of the progress minority institutions have made and envision making with Federal research funds.

We rely on this Committee to spearhead revisions in the Administration's fiscal 1986 budget and spending categories. Because, in 1984 and 1985 you increased appropriations for the NIH (DRR's) MBRS Program. They were appropriated; and for your efforts you have our gratitude. However, what is really at risk, if government and researchers fail to use their leadership skills to develop a healthier America, is too important to overlook.

The Administration's FY 1986 budget plan reflects a determined effort to reduce the number of scientific programs in the future, instead of restricting them to their present level. The Division of Research Resources' budget request is $263,040,000. The current estimates for 1985, $305,404,000. If the 1986 request is accepted there would be a decrease of approximately 13.9% ($42,364,000). In addition, the method of funding programs will result in a greater decrease in funding for some projects. We refer to multi-year funding, a creative process short-changing NIH's Budget -- limiting the opportunities of scientists to contribute to our Country's technological strength and growth.

Instead of merely restraining the growth of spending for scientific activities the multi-year funding will ensure no growth and seriously impact on new scientific endeavors in the years to come. This would affect NIH's RO-1 type research grants, Clinial Research Program, Biomedical Research Technology Program, and the Laboratory Animal Sciences & Primate Research Program; and research center grants now investigating in such areas as cardiology, diabetes, genetics, biomedical engineering, hematology, hypertension, nutrition, neurology, and rheumatology.

We commend and support your initial budgetary strategies which respond to these problems. Senate Joint Resolution 89, to have NIH provide the full complement of new and competing research grants provided by Congress for fiscal 1985, made a difference for public opinion in prioritizing budget cuts. It is reassuring to know that Congressional leaders and scientists concur in their major objective. Your legislative intent for increasing NIH funds in fiscal years 1984, 1985, and 1986 reflects a belief that the key to maintaining U. S. leadership in health research is the provision of a degree of stability that helps attract talented, innovative new researchers into the health field--a perception which enables progress to continue without wide fluctuations in program support. The strategy also provides established researchers continued support for quality research.

President Reagan, in his recent budget message to the Nation, addressed the need for government to make hard choices on budgetary expenditures. He spoke of attacking excessive spending across the board and to identifying programs vital for national priority to receive substantial funding. We concur; most Americans deplore deficit spending and support economic growth. However, we contend that biomedical research and biotechnology, and health are vital programs which should be considered national priorities.

When addressing the dedication of the Dolphus E. Milligan Science Research Institute Building, Atlanta University Center, NIH Director James B. Wyngaarden pointed out, "It comes as no surprise that biotechnology is of national interest at this time--its future may play a large role in the prospects for the national economy. Right now, the U.S. is the world leader in most areas of biotechnology, with more companies, products, scientists and government support than anywhere else. The challenge now is to maintain and expand the country's competitive position."

Through various programs funded by NIH, particularly the Division of Research Resources, minorities and minority institutions have made significant contributions to this country's "front runner" status in biomedical research and biotechnology. I will briefly cite a few examples of these contributions.

The MBRS Program

Since the incorporation of the Minority Biomedical Research Support Program in 1972, 105 colleges and universities have received your support. These institutions -- Atlanta University Center, Inc., Benedict College, Florida A&M University, Lincoln University, Hunter College, Jackson State University, Meharry Medical College, School of Medicine, Montana State University, Navajo Community College, Northern Arizona University, Talladega College, Virginia State University, University of Hawaii, University of California, San Diego, and University of Southern Colorado, to name a few -- are strategic in their contribution into the human resource development field and in the advancement of scientific and technical knowledge.

Government funds of $22 million for fiscal 1984 helped provide scientific equipment, facility renovations, improvement of animal care facilities, student support, and release of faculty from teaching to conduct biomedical research. These project grants are providing 1,020 undergraduate students, 388 graduate students, and 736 faculty with the opportunity to serve their country in their career fields. Graduate and/or undergraduate students play an integral role in research activities at most minority institutions. Undergraduate institutions are particularly reliant upon a pool of budding young scientists. In order for this pool to be accessible for assistance and training, it is essential that MBRS student salaries be raised to a level competitive with other programs. Moreover, these students represent the raison d'etre of these institutions. Thus, it is important that their summers are filled with meaningful experiences. In order to bring student salaries to a competitive level we are requesting an additional $2,000,000.

Faculty and students engage in projects on: DNA and its complexes with anti-cancer agents: biomolecular studies of the sense of taste; genetic engineering; early brain damage and behavioral development; health and acclimatization of commuters in response to altitude; pharmacological evaluation of bioactive substances from the sea; sickle cell disease and auditory functioning; biology of the aging cell surface; and, virus-resistant crop varieties as potential sources of antiviral compounds.

These research projects are practical today and are important to our current scientists, and our future scientists who seek long-term commitments from government for increasing the rate and depth of these projects. Minority scientists accept the challenge and their role as problem-solvers. However, a number of our institutions are entrenched in certain fundamental pitfalls which preclude rapid scientific development; therefore, we need your support in implementing a comprehensive program for greater contributions. This appeal is necessary regardless of our efforts to obtain private funding.

Comprehensive funding serves as the pathway from concept to production. These institutions highlighted are examples of grantees ready to stress applications of biotechnology in health care, food, and drugs, chemicals and environment.

Meharry Medical College, School of Graduate Studies

Meharry Medical College, Nashville, Tennessee, was established in 1876 and since its inception has graduated about 40 percent of the nation's black physicians. In 1972 a school of graduate studies, separate from the schools of medicine and dentistry, began. Currently Meharry enrolls 39 students in an interdisciplinary Ph.D. program with training in the areas of biochemistry, biomedical sciences, microbiology, and pharmacology. This represents one of the largest concentrations of black students pursuing the Ph.D. degree in the biomedical sciences in the country. The college projects that the enrollment in the Ph.D. degree program will increase to 60 students over the next three years.

Twenty-five students have finished the program since its inception. Many of these graduates are now holding positions with the Government (including NIH), academic institutions, and private industry. Postgraduate positions include: Group leader in pharmacological research, National Institute for Research, Nigeria; Postdoctoral study in joint programs, departments of Physiology at Atlanta and Harvard University; Postdoctoral study, department of molecular biology and chemistry, University of California at Irvine; Training fellowship in Cellular Biology, National Heart, Lung, and Blood Institute; and Postdoctoral study, Department of neurophysiology, Harvard University.

With the help of the MBRS Program the graduate and medical schools operate 27 research projects. Within the last three years, their accomplishments have earned them 20 competitive NIH research grants in the areas of cellular and molecular biology; neuroscience; tropical diseases; and in clinical research; and research training.

Talladega College

Talladega College is a small, coeducational, solely undergraduate, liberal arts institution in Talladega, Alabama. Since its founding in 1869, the college has established an excellent record of preparing students to go on to earn M.D.'s and science doctorates. In fact, Talladega College graduates earn doctorates at a rate of one of every twelve (1/12), the national average is one of twenty five (1/25). Though a small institution, Talladega college has been the recipient of MBRS funds since the Fall of 1973. Because of the biomedical research established through the support of the MBRS Program, the Division of Natural Sciences has been able to compete successfully for other funds, supporting faculty, undergraduates, and high school students.

MBRS supported research at Talladega College includes: Studies of the effects of select food additives and medicines on development; red blood cell chemistry (the metalloporphyrins); the effects of pesticides on the cell biochemistry, and the deposition of aerosol particles in human lung bifurcations. Other Federally funded research has included liquid crystal studies, alcohol fuels production, and far infrared spectral analysis.

Atlanta University Center (AUC) Dolphus E. Milligan Science Research Institute (SRI)

Atlanta University produces more Ph.D. students than any other university participating in the MBRS Program. It is gradually approaching the point where it will graduate 10 percent of all the Black Ph.D.'s produced in the country in biomedical sciences.

SRI is the only research institute associated with an institution, in this case, system, of Black higher education. The institute was dedicated on March 9, 1985. Dr. James B. Wyngaarden was keynote speaker. This dedication activity was followed by a colloquium which included the following speakers: Drs. Marilyn Jacox, George Pimentel, William A. Guillory and Nobel Laureate, William N. Lipscomb.

The Dolphus E. Milligan or SRI facility houses and operates the MBRS Program, sponsored by DRR, for the member institutions of the Atlanta University Center, including Atlanta University, Clark College, Morehouse College, Morehouse School of Medicine, Morris Brown College and Spelman College. Thirty-three Ph.D.'s have been produced with support from the MBRS Program; also a variety of research projects, and the development of a P-3 Recombinant DNA laboratory -- which has resulted in increased research in genetic engineering and biotechnology.

In addition, the Divison of Research Resources granted funds to Atlanta University Center to purchase a terminal to connect to the National NIH PROPHET computer system. Housed in the Center's Science Research Institute, this resource is the only one of its kind available to investigators from the Atlanta University Center, Georgia Institute of Technology, Emory University, Georgia State University, the University of Georgia-Athens, and other institutions located in the southeastern states.

The Institute presently has a staff of 38, including 12 staff scientists, 3 postdoctorates, and 2 support service personnel (Machinist and Electronics Technician). The remainder are graduate and undergraduate students.

Our developing recombinant DNA, genetic engineering, and biotechnology programs at SRI include: isolation and characterization of renin cDNA from mouse neuroblastoma, molecular biology of Clostridium difficile, cloning and sequencing of cDNA for gluconeogenic enzyme fructose 1,6-bisphosphatase mRNA, thermophilic bacterial virus from clostridia and virus-infection and drug value of marine algae.

Four programs designed to complement and expand the efforts and mission of the MBRS Program were started in 1985 with appropriation from DRR. They are: the Thematic Project Grant ($1 million); the Grant Program for Undergraduate Colleges ($1 million); the Research Centers in Minority Institutions (RCMI) Programs ($5 million); and the Academic Research Enhancement Award ($5 million). I will briefly describe them.

Minority Biomedical Research Support Thematic Project

Evaluation of some MBRS institutions shows that there are programs capable of increased faculty and inter-departmental collaboration based on specific research themes or disciplines. The Thematic Project Grant Program, which represents one more step towards regular NIH grant support, provides resources for research (in areas such as biochemistry, molecular biology, immunology, biophysics, environmental health, molecular genetics, behavioral science, or toxicology) where faculty with similar or complementary research competence provide synergism to the research activity. We recommend continuation of this program.

Minority Biomedical Research Support Grant Program for Undergraduate Colleges

Black colleges and universities (HBCU's) in this country enroll about 17 percent of all black college students, yet these institutions graduate 53 percent of the black baccalaureate degree recipients. Eighty-five percent of all Black Ph.D.'s graduate from black institutions at the baccalaureate or masters level 79 percent of all black physicians graduated from black schools at the baccalaureate level. Despite these figures blacks hold fewer than 2 percent of science doctorates.

Budgetary constraints and other factors prevent HBCU's from providing institutional funds to develop and support the resources needed to encourage the conduct of scientific research. The Minority Biomedical Research Support Grant Program for Undergraduate Colleges helps increase the number of minorities prepared to pursue biomedical research careers by supporting biomedical enrichment, pilot studies (research initiation) and established projects. We recommend continuation of this program.

Research Centers in Minority Institutions (RCMI)

The RMCI Program only supports graduate research activities in the biomedical sciences at minority institutions with strong graduate programs.

With the criteria established by NIH, 16 minority institutions are eligible for participation. Funded with a $5 million appropriation, the program announced the first round of applications in 1985, and has received 17 applications. Strong interest has been generated for the program in terms of training minority students at the Ph.D. level.

Representing another step toward expanding the nation's capability for research in health sciences the RCMI Program strengthens research environments by providing support for faculty expansion and enrichment, physical facility and improvement, and other health research related activities, including laboratory renovation and equipment replacement. We recommend continuation of this program.

Academic Research Enhancement Award

This unique program carries out Congressional intent to develop research projects or expand ongoing research activities in areas related to the health sciences. The one-time (seed) awards are granted to faculty at non-research-intensive four-year academic institutions which are providing baccalaureate training for a significant number of our Nation's research scientists. Qualified individual scientists receive support for feasibility studies and other small-scale projects preparatory to seeking more substantial funding through traditional NIH grant mechanisms. Here, 1,000 institutions distributed throughout the United States and its territories, not eligible for the NIH Biomedical Research Support Grants in fiscal 1985, can receive these enhancement awards.

In addition to the efforts just described, we are proposing two new initiatives. They are: infrastructure support for the development of doctoral study and research programs, and research institutes. These new thrusts are consistent with the recommendations of the Lake Arrowhead Conference - out of which grew a document detailing a comprehensive 20-year plan for upgrading science and technology at minority institutions. That these Initiatives (and the Arrowhead plan) can be put into effect, is given credence by Executive Order 12320, which mandates government agencies to undertake and highlight efforts "designed to achieve a significant increase in the participation of historically Black colleges and universities (HBCU's) in Federally sponsored programs." We recommend continuation of this program.

Infrastructure to Support the Development of Doctoral Study and Research Programs

One of the review and selection criteria for regular NIH grant support is whether the applicant institution has an adequate infrastructure for the development, management, and conduct of research and related activities; such as, pre-submission review, fiscal accountability, institutional planning oversight, staffing and monitoring of research risks. This criterion poses problems minority leaders are now ready to and must address. "Of the more than 3,000 instititutions of higher education in the United States, about 120 or 4 percent handle more than 90 percent of all organized university research. Conventional institutional organizational systems have no research component. In research environments, especially small shops, with little or no supporting infrastructure, the burden of providing "everything" that is needed suppresses and discourages even the most ardent research faculty member. This may be one of the reasons why the "big get bigger and the small get smaller" in university research.

A small but growing university biomedical research program has great difficuty upgrading sufficient support functions before the faculty becomes discouraged and ceases to perform research. A strengthened instititutional research infrastructure would ameliorate many of the problems by providing additional support services, personnel, and a plan. The results are (1) a high degree of responsiveness, accountability, and responsibility for conducting research, and (2) the development of leaders in the scientific, biomedical scientific, and other technological areas.

This thrust is consistent with the fact that on September 22, 1982, in conjunction with his hosting HBCU Presidents in the White House to celebrate the first year of Executive Order 12320, President Reagan issued a Memorandum to Federal Agency Heads directing them to "place emphasis on use of Federal funds to improve HBCU administrative infrastructures." The program cost we recommend here is $500,000 per site.

Research Institutes

It is widely recognized that major research facilities impact the quality of graduate research at academic institutions. Examples of such cooperative arrangements are the University of California/Lawrence Berkeley Laboratory, University of Colorado/JILA, etc. In order to accelerate the rate at which similar quality is achieved at minority institutions, we recommend funding of $5 million for Biomedical Research Institutes which would be administered independently of the associated academic institurtions. The Lake Arrowhead Conference Report recommends four sites. Several kinds of advantages which can accrue to the institutions associated with Research Institutes are: 1) Concentration totally on the development of a modern research facility; 2) Accountability in research productivity; and 3) Research support resource for the academic community, e.g., collaborative research programs, etc.

By their very nature, such institute (and the associated institutions) interface with majority institutions, national laboratories, and industrial corporations. This program, by establishing state-of-the-art national biomedical research facilities, would fall under the White House's "Facilities and Equipment" strategy plan to achieve objectives of Executive Order 12320.

In short, President Reagan's Federal Agency Performance Report in March 1984 shows that obligations to minority institutions have exceeded the obligations for preceding years. This gives us optimism that our recommendations contained and justified herein will be acted upon favorably. Thank you for your attention.

National Institutes of Health [General]

STATEMENT OF THOMAS CLARKSON, DIRECTOR, ENVIRONMENTAL HEALTH SCIENCES CENTER, UNIVERSITY OF ROCHESTER

Senator WEICKER. Now we go into the National Institutes of Health. This is a general category. We have Thomas Clarkson, director of the Environmental Health Sciences Center, University of Rochester.

Mr. CLARKSON. Mr. Chairman, you have my testimony. I will be brief and summarize it with one short clause.

Senator WEICKER. I gave up on lunch a half hour ago. [Laughter.]

Mr. CLARKSON. I am appearing on behalf of the Association of University-based Environmental Health Sciences Centers. These centers, as you know, Mr. Chairman, have been designed to deal with the complex world problems posed by toxic chemicals and modern technology. The fact that over 68,000 manmade chemicals are in use in our society is a testament to their usefulness and to the productivity and ingenuity of our chemical industry. The fact that so few of these, probably less than 1,000, have been adequately tested for safety speaks to the challenge that we face in protecting the public health.

In addition, the chemical industry exports and manufactures large quantities of chemicals overseas. Such technology transfer presents unique problems for developing countries lacking advanced medical and public health information resources.

Our chief concern in toxicology has been with long-term exposure to air, water, and food pollutants and the role they play in chronic ailments of great concern to the public, such as cancer, lung and heart diseases, birth defects, Alzheimers and other diseases of the aging we have heard about this morning, and problems related to nutrition and lifestyle.

Furthermore, we must anticipate both the immediate and long-term consequences of accidental discharge from industries and of the continuous discharge from the more than 800 dumpsites in the EPA's priority list.

The environmental health sciences centers and the marine/freshwater biomedical centers were designed to establish a stable core of biomedical scientists to pursue research into the effects of chemicals on human health. Since these centers are embedded in the best medical schools and research departments in the country, they can exploit the latest developments in biomedical research. We have heard this morning about genetic engineering and so forth.

As you know, Mr. Chairman, through your efforts in the last year's Congress, funds were added to the university-based marine/freshwater centers. However, restrictions in the allocation of such funds this year have negated those efforts. Indeed, during the past 3 years, the centers have struggled with an absolute dollar cap on center grants. Each year's inflation has eroded their base of support.

The effect is insidious and corrosive, hampering our capacity to attract young faculty. This damage will be magnified even more if NIH reduces the number of new research grants. Without core research support, the centers cannot function. Without competitive research grants, the centers will no longer be able to make maximal use of the funds received for core support.

The reduced availability of new NIH research grants affects not only the EHS centers but could impair the entire biomedical research community. The NIH peer review system has made the quality of research in this country the envy of the rest of the world. For it to function effectively, support needs to be rescued from its current decline.

On behalf of the nine environmental health sciences centers and the three associated marine/freshwater biomedical centers, I am requesting that our budgets at least be allowed to rise to the levels contained in the fiscal 1985 congressional appropriation, and on behalf of the entire community of biomedical scientists that the funding for new and competing grants be continued at the level proposed by Congress. Unless funding is maintained at the levels proposed by Congress, it will not be possible to carry out two important initiatives—first, to convert the marine/freshwater biomedical centers into full-fledged specialized centers for research; and second, to conduct research on potential human health effects of acid rain. Without the full level of funding, these activities will not be possible.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony.

[The statement follows:]

STATEMENT OF THOMAS CLARKSON

My name is Tom Clarkson. I am Professor of Toxiology in the Medical School at the University of Rochester, Rochester, N.Y. I have been head of the Division of Toxicology since 1980 and director of the Environmental Health Sciences Center since 1975.

I am here to speak on behalf of the **Association of University-based Environmental Health Sciences Centers**. This is an organization of nine NIEHS supported Environmental Health Sciences Centers located in universities throughout the country: University of California at Berkeley, University of Cincinnati, Harvard University, Massachusetts Institute of Technology, Mount Sinai School of Medicine, New York University Medical Center, Oregon State University at Corvallis, the University of Rochester and Vanderbilt University. This Association now includes three Marine/Freshwater Biomedical Centers at Duke University, University of Washington at Seattle and the Medical College of Wisconsin.

These centers have been designed to deal with the complex, broad problems posed by toxic chemicals and modern technology. How many lung cancers are due to the widespread use of asbestos? Does lead cause a reduction of intelligence scores in children, or raise blood pressure in the aging? Is indoor air pollution a newly discovered major health hazard?......Will new and advanced technology bring with it new health hazards? Are the workers in Silicon Valley kept as clean as the computer chips? What do we know of the toxic properties of those new and exotic elements used in modern electronics? What should we do about the one million pounds of mercury spilled into the environment from a federal facility? How do we cleanse our 800 high priority chemical dumpsites and, in doing so, not transfer the pollutant to another place and to other people?

The fact that over 68,000 man-made chemicals are in use in our society is a testament to their usefulness and to the productivity and ingenuity of our chemical industry. The fact that so few of these, probably less than 1000, have been adequately tested for safety speaks to the challenge that we face in protecting the public health. The chemical industry remains vigorous and innovative which provides a challenge to research in the development of effective and efficient test procedures. In addition, the industry exports and manufactures large quantities of chemicals overseas. Indeed, we have exported some toxic chemicals which were banned for use in this country. Such "technology transfer" presents unique problems for developing countries lacking advanced medical and public health information resources.

Our chief concern in toxicology has been with long term exposure to air, water and food pollutants and the role they play in chronic ailments of great concern to the public - such as cancer, lung and heart diseases, birth defects, Alzheimers and other diseases of the aging, and problems related to nutrition and lifestyle. The Bhopal disaster illustrates several dimensions of chemical safety that have received little attention. First, this disaster was preceded by several others in developing countries unprepared to handle advanced, potentially dangerous technology. Given the current pace of technology transfer, I doubt that this will be the last disaster. A second dimension is the threat of long term sequelae in many more people than those showing immediate effects. A third dimension is a new awareness of our own vulnerability; we comfortably assumed that such disasters simply could not happen to us. Now we know that we must be prepared to anticipate both the immediate and long-term consequences of routine exposures as well as accidental discharge from industries and of the continuous discharge from the more than 800 dumpsites in the EPA's priority list.

The Environmental Health Sciences Centers and the Marine/Freshwater Biomedical Centers were designed to establish a stable core of biomedical scientists to pursue research into the effects of chemicals on human health. Since these centers are embedded in the best medical schools and research departments in this country, they can call upon a broad range of medical and scientific expertise. These centers provide a focus for extensive networks of collaboration both within their own institution and with outside institutions in the U.S. and abroad. The stability afforded these centers by long term funding fosters growth of such collaboration and enables them to exploit the latest developments in biomedical research. New molecular biology technology is being rapidly developed in universities and the EHS Centers are prepared to utilize such information as resources are made available.

These centers also act as information resources. They provide experts to virtually every committee in the EPA, FDA, DOE and other federal agencies responsible for protecting public health from adverse effects of chemicals in our environment. Many work closely with local agencies as well as serving as community resources. They can also respond, as they have in the past, to massive chemical health disasters. For example, the Center at Rochester has made a special study of such disasters since we were called upon to help deal with a massive outbreak of methylmercury poisoning in the Middle East in the 1970s. This revealed that, besides the obvious acute outbreaks, "near misses" also occur with disquieting frequency. In the winter of 1980-81 in Buenos Aires, approximately 12,000 infants were exposed to an organic mercury antimicrobial compound that had contaminated their diapers. The acute health effects were mild but had the exposure been somewhat higher, we could have experienced another mass health disaster on the scale of Bhopal. In another example, one of the Centers predicted the carcinogenicity of a chemical in industrial use, confirmed its activity in laboratory tests, then proceeded to undertake an industry-wide survey which showed lung cancer in workers from exposure to this chemical.

The University-based health centers undergo continuous rigorous quality control. Each member of the center, besides meeting university standards of exellence, must compete for research support from NIH and other agencies as well as meet stringent review criteria set by the centers themselves. The Center Grant, itself, provides consistent core support for faculty dedicated to careers in environmental health sciences. Center Grant funds are utilized in a very efficient manner to enhance the ability of the faculty to conduct research funded mainly by their competitive research grants and contracts.

As you know, Mr. Chairman, through your efforts in the last year's Congress, funds were added for the University-based Marine/Freshwater Centers. However, restrictions in the allocation of such funds this year have negated those efforts. Indeed, during the past three years, the Centers have struggled with an absolute dollar cap on Center Grants. Each year's inflation has eroded their base of support. The effect is insidious and corrosive, hampering our capacity to attract young faculty. This damage will be magnified even more if NIH reduces the number of new research grants. Without core research support, the Centers cannot function. Without competitive research grants the Centers will no longer be able to make maximal use of the funds received for core support. In the past, the Centers have been highly successful in using small pilot grants to promote new research directions. In this process, the center awards a small sum, usually about $5000, to allow an investigator to test the feasibility of a new idea. The preliminary data are then used as the basis for a NIH grant application. Our experience shows that nearly two-thirds of the pilot grants lead to a successful application by the young investigator. This process by which new ideas ferment into successful projects will fail if NIH grants become increasingly difficult to obtain.

The reduced availability of new NIH research grants affects not only the EHS Centers, but could impair the entire biomedical research community. A typical NIH study section committee may review over 100 applications, but less than one third of those approved may be funded. At this level, success becomes almost a matter of chance since the difference in merit between a funded and unfunded application is so small. Such a result jeopardizes the basis of the peer review system and future advances in biomedical sciences. This NIH peer review system has made the quality of research in this country the envy of the rest of the world. For it to function effectively, support needs to be rescued from its current decline. In the 1960's the proportion of approved and funded grants was as high as 70%.

To judge from the sharp decline in applications for graduate training, a clear message has been received by the younger generation that a biomedical research career is too risky to pursue. This message extends beyond an immediate impact on our programs; it also mortgages our future. Five years from now, the trained minds we need could well not be there. We could face the danger of a vicious cycle - less money - fewer students - a narrower cadre of trained experts - a diminished biomedical program - less obvious needs for funding, and so on. At a time when increasing numbers of serious toxicological questions are being raised about risks related to ongoing releases of environmental pollutants and toxic waste dumpsites, it would be recklessly imprudent to reduce support needed to train needed scientists and to sustain their scientific research efforts to provide a critical scientific basis for the difficult and expensive decisions which must be made.

On behalf of the nine Environmental Health Sciences Centers and the three associated Marine/Freshwater Biomedical Centers, I am requesting that our budgets at least be allowed to rise to the levels contained in the fiscal 1985 Congressional Appropriation and on behalf of the entire community of biomedical scientists that the funding for new and competing grants be continued at the level proposed by Congress. Specifically, unless funding is maintained at the levels proposed by Congress, it will not be possible to carry out two important initiatives - first, to convert the Marine/Freshwater Biomedical Centers into full fledged specialized Centers of research and second, to conduct research on potential human health effects of acid rain.

STATEMENT OF DEBRA HANANIA-FREEMAN, PUBLIC HEALTH CONSULTANT, SCHILLER INSTITUTE

Senator WEICKER. Next we will hear from Debra Hanania-Freeman, public health consultant for Schiller Institute.

Ms. HANANIA-FREEMAN. Thank you, Mr. Chairman. I am going to try to summarize my testimony for the sake of time.

I think that everyone is probably aware that such diseases as cholera, malaria and AIDS are now devastating the continent of Africa. The point the Schiller Institute would like to make here today is these diseases do not respect national borders and today are growing so luxuriant they will hardly remain confined to that continent. Under such conditions, mutation to more virulent forms and increased transmissibility will occur. It is only a matter of time before they spread to the advanced sectors. Probably AIDS is exemplary of this situation. Originally described in promiscuous male homosexuals and intravenous drug abusers, now over 10,000 cases of AIDS have been reported in the United States and approximately 48 percent of these people have died already. The number of reported cases in 1984 rose 74 percent over the number reported in 1983, and the fatality rate involved is much higher among affected children; among victims diagnosed before January 1984 it is 73 percent.

New York, New Jersey, California, and Florida account for over 75 percent of the reported cases. While the disease has largely remained confined to four major risk groups, recent studies indicate that a rapid expansion into the general population could occur under conditions of nutritional and sanitary breakdown.

The current incidence of AIDS in the United States is one which is not only increasing but recent screening tests have led to present estimates there probably are as many as 300,000 people who have been exposed to the virus in the United States and that at least 10 percent of them, or 30,000, will come down with the disease in the very near future.

As striking as these figures are, the incidence of AIDS is at least 10 to 20 times higher in Zaire and other areas of sub-Saharan Africa. Here the disease is spreading in epidemic form by heterosexual contact and poor sanitation, in a population whose immune systems are depressed by malnutrition and chronic infectious disease.

Present medical opinion is that the disease has been endemic in Africa for a long time. What we previously thought were the risk groups simply does not hold.

While the basic U.S. sanitary infrastructure is just beginning to crumble, as witnessed by the dysentery outbreaks in Pennsylvania last year, it is in fact the case that the virus HTLV associated with AIDS, which is being disseminated in the United States, is resulting primarily within communicatives that have circumvented our basic goal of sanitation.

We are also looking at a situation where we have 20 to 30 million people in our country who are subsisting on diets that are approximately equivalent, unfortunately, to those of the Nazi concentration camps. These same people are living in crowded, filthy conditions in decaying inner cities where there is collapsing sanitation and medical care. Hunger and outright starvation have returned to many areas of the Nation. The widespread hunger found during the late 1960's, which had been significantly alleviated by such programs as food stamps, has now returned as these programs have been dismantled.

A study entitled "Hunger in America—The Growing Epidemic" documents the reemergence of malnutrition and outright starvation in most regions of the United States. The physicians' task force on hunger in America has conservatively estimated that at least 20 million Americans experience actual hunger to the extent of running out of food for 2 or more days a month.

Diseases which previously were only associated with extreme starvation in famine-ridden regions of Africa are now appearing in hospitals and pediatric clinics from Albuquerque to Chicago. Most of these cases do not result from abuse and other problems but simply are a result of the lack of basic necessities for child health and nutrition among our increasingly poor population.

There are other, more widespread, conditions such as anemia, failure to thrive, diarrhea, and dehydration, all manifestations of childhood malnutrition.

What we are also looking at is a situation in which the main reservoir of tuberculosis in the United States, which of course hits the elderly, which is a group also hard hit by hunger and malnutrition. What is happening right now is many elderly people who were cured of tuberculosis many years ago are now having their TB reactivated as a result of poor nutrition and declines in their immune functions. This is now resulting in grandchildren passing this disease on to their children, and childhood TB, which previously was a marvel in most public health institutions, is now becoming quite common.

If you take this and couple it with the situation that we see where our own Department of Agriculture is now recommending a diet, we see literally the equivalent of the diet that was given to people in the concentration camps, we are looking at a situation where the combination of malnutrition, decreased health services and sanitary infrastructure collapse, is creating expanding pockets of poverty and malnutrition in the United States, which is now characterized by Third World infant mortality and disease rates.

This destruction of the labor force represents one of the gravest national security threats which faces the United States today. In our opinion, it is a direct consequence of the free enterprise ideology poisoning the present administration.

In order to avert what we consider to be a literal biological holocaust, I would urge this committee to take these things into account as they consider the budget for NIH, particularly in terms of the public health measures you will be asked to consider.

PREPARED STATEMENT

Senator **Weicker**. Thank you very much for your testimony. It will be included in the record in its entirety.

Ms. **Hanania-Freeman**. Thank you.

[The statement follows:]

STATEMENT OF DEBRA HANANIA-FREEMAN

An epidemic of the dreaded disease cholera has erupted among the increasing millions already dying of famine and disease on the continent of Africa.

The African crisis is a direct result of the International Monetary Fund's austerity conditionalities, designed to effect the depopulation policies of the Carter administration's GLOBAL 2000 report. Under these policies, African agriculture, which once produced exportable food surpluses, has been ravaged and the populations herded in to refugee camps, which serve to concentrate large numbers of sick and starving people in an environment suitable to the rapid spread of disease and lacking any means of prevention or treatment. These camps serve as giant cultures for growing viruses, bacteria, and parasites, and propagating them in a susceptible population.

ARE WE NEXT?

Cholera, malaria, AIDS, and other diseases now devastating Africa, do not respect national borders and are growing so luxuriantly that they will hardly remain confined. Under such conditions, mutation to more virulent forms, and increased transmissibility, will occur. It is only a matter of time before they spread to Europe and the United States, where the same IMF policies are creating growing pockets of nutritional and sanitary collapse, which will provide the necessary concentrations of susceptible individuals.

AIDS is exemplary of this situation. Originally described in promiscuous male homosexuals and intravenous drug abusers, now over 10,000 cases of AIDS have been reported in the U.S. and approximately 48% of these people have died already. The number of reported cases in 1984 rose 74% over the number reported in 1983. The fatality rate is higher among affected children; among victims diagnosed before January 1984, it is 73%.

New York, New Jersey, California, and Florida account for 75% of the reported cases. While the disease has largely remained confined to four major risk groups, recent studies indicate that a rapid expansion into the general population could occur under conditions of nutrtitional and sanitary breakdown.

In April 1984, scientists announced the isolation of a virus identified as the causative organism of AIDS. Since then, a technique for growing the virus in quantity has been developed and a blood test for exposure to the virus is now being used for screening tests on patients and donated blood. Initial results of studies of exposure were "very disturbing," according to Dr. Harold Jaffe of the Center for Disease Control. Exposure to the virus is quite high among certain groups and may approach 30-50 times the number of presently reported cases. Between 5% and 20% of these persons will develop the disease over the next five years. Present estimates are that as many as 300,000 people have been exposed to the virus in the U.S. and that 10% of them will come down with the disease.

As striking as these figures are, the incidence of AIDS is at least 10 to 20 times higher in Zaire and other areas of sub-Saharan Africa. Here the disease is spreading in epidemic form by heterosexual contact and poor sanitation, in a population whose immune systems are depressed by malnutrition and chronic infectious disease. Present medical opinion is that the disease has been endemic in Africa for a long time, and that the HTLV virus was distributed along the old Portuguese slave-trading routes. The epidemic in Africa reflects the extreme breakdown conditions there and indicates that, should similar nutritional and sanitary collapse occur in the U.S., similar epidemics would occur due to the dissemination of the virus in the U.S. population.

While the basic U.S. sanitary infrastructure is just beginning to crumble, as witnessed by the dysentery outbreaks in Pennsylvania last year, HTLV virus has been disseminated primarily due to certain lifestyles which have circumvented the basic goal of sanitation: the separation of what we eat and what we excrete. Homosexual practices result in significant fecal-oral contamination and transmission of numerous viruses, bacteria, and parasites from one person to another. As a result, a large reservoir of this virus exists, especially in the collapsing inner cities.

HUNGER IN AMERICA

In the U.S., 20 to 30 million people are subsisting on diets approximately equivalent to those of the Nazi concentration camps. Many of these people are living in crowded, filthy conditions in our decaying inner cities, with collapsing sanitation and medical care. Hunger and outright starvation have returned to many areas of the nation as the vaunted "economic recovery" continues to unfold. The widespread hunger found during the late 1960s, which had been significantly alleviated by various programs such as food stamps by the late '70s, has now returned, as these programs have been dismantled to pay usury on the federal debt.

A study entitled HUNGER IN AMERICA-THE GROWING EPIDEMIC, documents the reemergence of malnutrition and outright starvation in the Mid-Atlantic, Southeast, Midwest, and Southwest. The study, prepared by the Physicians' Task Force on Hunger in America, conservatively estimates that at least 20 million American experience actual hunger to the extent of running out of food for two or more days a month. The heaviest burden falls upon children and the elderly, with approximately half a million children suffering malnutrition characterized by low birth-weight and stunted growth.

In areas of decaying central cities, cases of marasmus and kwahiorkor, classically associated with the extreme starvation in famine-ridden Africa, are appearing in hospitals and pediatric clinics from Alburquerque to Chicago. While an occasional such case may result from abuse and neglect, most result from lack of the basic necessities for child health and nutrition among our increasing poor population. The 350,000 families whose unemployment benefits were terminated are likely to produce more of these cases, as other support mechanisms collapse under the pounding of the "invisible hand" of free-enterprise economics.

More widespread are conditions such as anemia, failure to thrive, diarrhea, and dehydration, as manifestations of childhood malnutrition. Anemia is associated with decreased energy and diminished immune function, and affects 20-30% of poor children. Many of these children were low-birthweight babies to begin with, as a result of maternal malnutrition. Low birth weight itself is associated with markedly increased infant mortality, physical and emotional handicaps, school problems, and major and minor nervous system disorders. Low-birthweight babies are 30 times more likely to die before the age of one year than their normal birthweight peers, accounting for more than half the infant deaths in the U.S. Low birth weight is the eigth leading cause of death in the U.S., where the last few years have witnessed a sharply rising infant mortality rate in inner city areas.

When this group of susceptible children is placed in the context of the general collapse of housing and sanitary infrastructure, conditions are created in which the devastating infectious diseases of the past, such as tuberculosis, are beginning to reappear. Under these conditions, our malnourished elderly are reactiviating the tuberculosis they were healed from years ago and passing it on to their grandchildren. Childhood tuberculosis, once almost eradicated by vigorous public-health measures and modern drug therapy, is now so frequent in cities such as Chicago as to be considered a routine problem.

In addition to malnutrition, infant mortality is a result of lack of prenatal care because of the closing of clinics and dismantling of health infrastructure in response to federal, state, and local budget cutbacks. The proposed alternatives of community health workers and low-technology primary care, closely parallel the proposals for low-technology primary health care in the developing sector, was enunciated by the World Health Organization at a 1978 conference at Alma Ata. It was at this conference that the formal decision not to invest in major health-care infrastructure was taken.

The main reservoir of tuberculosis in the U.S. is the elderly, a group also hard hit by hunger and malnutrition. In Chicago many elderly people subsist on a diet of 550 calories and 24 grams of protein, which can only be compared to the Nazi concentration camp diet of 800 calories and 40 grams of protein. Under such conditions, the age-associated decline in immune function is accelerated and healed tuberculosis is reactivated. When these elderly live in crowded conditions with young children, the result is the reported increase in tuberculosis in children. This in turn is an indicator of a growing reservoir of physically debilitated people, which provides the fertile soil for the spread of epidemics such as AIDS, typhoid, typhus, or the bubonic plague.

CONCENTRATION CAMP NUTRITION

Contrary to the austerity diet fanatics, hypertension, diabetes, and cardiovascular disease are also common among poor adults. These diseases reflect lifetime nutritional deficiency, especially of high quality protein. Such deficiency is guaranteed on the so-called thrifty diet devised the Department of Agriculture, which provides roughly the 40 grams of protein alloted to residents of Dachau and generously adds 400 calories from low qualtiy starches. According to the USDA's own study, over 80% of the households whose food spending equals the thrifty food-plan level suffer malnutrition.

Any realistic assessment of the dietary profile associated with a healthy population, characterized by low infant mortality and extended productive life span, requires, as a first priority, a diet of at least 100 grams of protein a day, of which 70 grams would be high-quality protein, and a calorie throughput of 2,500-3,000 calories a day.

The thrifty food plan, however, was devised by programming a computer to come up with a diet equal to a present federal expenditure level, without any consideration of nutritional adequacy.

The thrifty diet is coherent with a general shift in U.S. dietary habits away from a relatively high-protein, red meat based diet, to a lower qualitative and quantitative protein intake and an increase in carbohydrates and roughage, which more closely approximated Third World diets. The brouhaha about far and cholesterol, whatever its merits in individual cases, has served to smooth the adjustment to a lower-qualtity diet in the American population. Since the mid-sixties, there has been a broad attack on the American diet by a variety of "nutritionists" and consumer advocates. The net result has been to shift from a diet associated with an average life expectancy of 72 years, toward one associated with a life expectancy of 42 years.

Since present policy is to cut costs first and foremost, a plethora of obstacles has grown up to prevent all those who actually qualify for food stamp benefits from receiving them. These take the form of long forms, long lines, threats of prosecution for fraud, and eligibility requirements which strip applicants of whatever remaining dignity and property they may posess. This has led to the phenomenon of decreasing numbers of recipients in many areas, even as poverty has substantially increased.

The combination of malnutrition, decreased health services, and sanitary infrastructure collapse, is creating expanding pockets of poverty and malnutrition in the U.S., characterized by Third World infant mortality and disease rates. This destruction of the labor force represents one of the gravest national security threats which faces the United States today, and is a direct consequence of the free-enterprise ideology poisoning the present administration, which is being manipulated by the same people who are destroying the Third World.

STATEMENT OF FRANK DEFORD, CHAIRMAN, BOARD OF TRUSTEES, CYSTIC FIBROSIS FOUNDATION

Senator WEICKER. Frank Deford, chairman, board of trustees, Cystic Fibrosis Foundation.

Mr. DEFORD. Mr. Chairman, I am by profession a writer, but I have been associated with the foundation since 1973. My involvement came about because my daughter, Alexandra, had cystic fibrosis. She died in my arms in January 1980 when she was only 8 years old.

Like so many kids with cystic fibrosis, she was an extraordinary person. I have even written a book about her. As agonizing as that experience was for me, I wanted people to know how painful and difficult it was for her to live, how wasteful it was for her to die, and how brave and gallant are all the children of cystic fibrosis that still fight the battle because they can be saved now.

Last year the Cystic Fibrosis Foundation raised more than $19 million. That is the most we have ever had. But it is not nearly enough to support the efforts needed to strike down this cursed and damnable disease. This is, however, right now at least the last most exciting and promising time in the history of cystic fibrosis research.

When Alex was alive, I knew and my wife knew and ultimately Alex herself knew she had to die. We could only pray for a miracle. But today we can reasonably expect an answer to cystic fibrosis. The cure is right now within our vision, and we think and believe with support it can soon be within our grasp. It is the largest fatal genetic disorder in this country.

Because of the exceptional work now being done in the field of genetics, which is simply exploding, a whole new door has swung open wide and we have suddenly been greeted with extraordinary scientific opportunities. It would be unforgivable not to take advantage of them.

We at the Cystic Fibrosis Foundation have intentionally designed our research programs to complement those of the NIH. In fact, we depend utterly on the NIH to fund research projects at higher levels of support than we can ever hope to achieve ourselves.

Cystic fibrosis is a baffling disease. It is the devil's own. It is primarily a disease of the lungs, so it attacks breathing, but also the digestion and, in effect, all of life itself. As a consequence, our involvement with NIH cuts across all lines. We have research taking place at three very different and disparate institutes. The text we submitted details the various ongoing projects and their significance.

I want to cite just one example which best suggests the crucial situation in our NIH partnership and how alert is our entire scientific community to cystic fibrosis. Last year two of the institutes jointly sponsored an application for genetic and metabolic defects underlying cystic fibrosis. The name itself is not really important new. What is important is it attracted 63 new applications for CF research, and 58 of the 63 were recommended for approval. That is over 90 percent. So to cut any form of assistance to cystic fibrosis now would only be pound-wise and penny-foolish.

I think it would be cruel to cut when at the moment at least we stand on the cutting edge of success in finding a cure.

The Foundation, Mr. Chairman, embraces the feelings of the ad hoc group for medical research funding, first, to increase the funding level to $5.7 billion for 1986 and to restore the original number of grants for 1985 and to maintain the current funding formulas for the long-term grants.

My daughter had to die. Three children in this country follow Alex to death every day with cystic fibrosis. Now at least we have the chance to save those who still suffer from this disease. For them and for the memory of my child, thank you very much for listening.

Senator WEICKER. Thank you very much for your presentation. Nobody can tell it better than one who has lived through it. Again, the committee will try to do everything it can to uphold your efforts. It certainly is no place to cut the budget.

You say three children every day die?

Mr. DEFORD. In the United States, yes, sir.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony.

Mr. DEFORD. I appreciate those remarks, sir.

[The statement follows:]

STATEMENT OF FRANK DEFORD

My name is Frank Deford and I am the Chairman of the National Board of Trustees of the Cystic Fibrosis Foundation. By profession, I am a writer. I have been associated with the Foundation since 1973. My involvement came about because my daughter, Alexandra, had cystic fibrosis. Alex died in my arms one Saturday afternoon in January of 1980 when she was only eight years old.

She was an extraordinary little person and I have even written a book about her, for as agonizing as that experience was for me, I wanted people to know how painful and difficult it was for Alex to live every day of her life, how wasteful it was for her to die, and how brave and gallant are the kids with cystic fibrosis who still fight the battles every day that Alex finally lost.

I wanted to tell Alex's story because I felt that, if I did, her life would mean more because it would bring the attention -- and with that, the resources, to find the cure that will save so many lives. The Cystic Fibrosis Foundation raises money to support programs of research, care, and education. Last year, we generated over $19.5 million. This is our most ever, but alas, not nearly enough to support the effort needed to put an end to this scourge of our young people.

Diseases supports much important CF research at the NIH. An NIADDK investigator, Dr. Paul Quinton of the University of California, Riverside recently reported an abnormality in the movement of chloride in the cells of the sweat glands, which are affected by the disease. Dr. Quinton demonstrated that there is a solid, reproducible indication of a biochemical defect that underlies cystic fibrosis.

The NIADDK intramural program developed a major new initiative in cystic fibrosis during the past year. Five research fellows are pursuing CF research under the guidance of expert NIADDK preceptors. These fellowships are supported in part by funds from the CF Foundation. The interdisciplinary work made possible by this innovative program is contributing to the training of researchers in areas that are fundamental to an understanding of this dreadful disease.

National Heart, Lung, and Blood Institute

The Division of Lung Diseases of the National Heart, Lung, and Blood Institute is the focal point for CF investigations. With funds from the NHLBI, Drs. Richard Boucher, Michael Knowles, and James Yankaskas at the University of North Carolina at Chapel Hill have described a cellular abnormality in airway epithelia similar to that reported in the sweat glands. For the first time, we have a common physiological event that helps to explain the pathology of CF.

Last year, the NHLBI awarded a small business incentive grant to a Massachusetts firm to identify the CF gene, using recombinant DNA techniques. Once the gene is identified, researchers will be in a far better position to understand the basic defect responsible for CF.

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases is a third Institute that supports CF research. Its focus is on the bacterial infections that devastate the lungs of CF patients. Researchers funded by NIAID have reported progress in defining the structure of the mutant form of Pseudomonas aeruginosa that colonizes the lungs of CF patients. This work may eventually result in a vaccine against Pseudomonas aeruginosa which is a major cause of respiratory disease in CF patients. It was, more than anything, what killed my child. A vaccine might have kept her alive long enough so that she could be with us when a cure or control is found.

Initiatives in Cystic Fibrosis Research

Two initiatives outside of the regular, ongoing programs of the involved Institutes highlight the importance of CF research at the NIH.

1. Last year, a special Request for Applications entitled "The Genetic and Metabolic Defects Underlying Cystic Fibrosis" was jointly sponsored by the NIADDK and the NHLBI. This RFA was intended to attract new investigators to the arena of CF-related research. Sixty-three applications were received, 58 of which were recommended for approval. The high quality of these applications will significantly strengthen the extramural CF research program. They also reflect the increased interest in CF on the part of the NIH and on the part of scientists.

2. A special conference, "Frontiers in Science Related to Cystic Fibrosis" on March 6-8, 1985, was also jointly sponsored by the NHLBI and the NIADDK. Conference Chairmen Drs. Joseph Goldstein and Michael Brown were joined by almost 100 talented basic researchers to examine innovative approaches to the study of CF. This "state-of-the-science" conference developed two major conclusions:

- Further research on the chloride transport abnormality is needed because this may indeed be the basic defect that is responsible for CF;
- The tools of modern molecular genetics now make possible a systematic search for the CF gene. Now is the time to aggressively pursue this exciting research avenue.

Our time is now. As much as I wanted to say those words when my child was alive, I honestly couldn't. Now I can. Our time is now.

We see continued medical advances as long as good research is adequately funded. Indeed, there are more opportunties than there are funds. Continued support of the CF research programs of the National Institutes of Health is imperative. Without it, the progress in CF research will come to an abrupt and painful halt. Unfortunately, the President's budget for FY 1986 and the modifications proposed for FY 1985 threaten to do just that.

We are particularly distressed by the Administration's proposals to reduce the number of competing research project grants at the NIH for FY 1985 from about 6,500 to 5,000, and to continue that reduced level of competing project grants into FY 1986. This would eliminate a significant number of research projects in cystic fibrosis and other important research areas, and severely impair the intramural research program by reducing the number of employees at the NIH.

The Administration's proposed FY 1986 budget for the NIH is $4.8 billion dollars. This is a decrease of over $300 million from that originally appropriated for FY 1985. It is truly disturbing that the research budget is being slashed at a time when continued high-level support will find the answers to cystic fibrosis and provide hope for the future for those who suffer from it. To cut any form of assistance to cystic fibrosis research would be penny-wise and pound-foolish. We are on the cutting edge of success.

The Cystic Fibrosis Foundation joins with other members of the Ad Hoc Group for Medical Research Funding in supporting an overall funding level for the NIH of $5.7 billion for FY 1986. We also recommend that the number of grants approved for funding in FY 1985 be restored to 6,500 and that no changes be made in the present NIH funding formulas for support of multi-year grants. We also urge you to assure the stabilization of the NIH intramural program, since the Administrations's proposed cutbacks threaten its continued viability.

Mr. Chairman, I thank you for the support this Subcommittee has given us in the past. We look forward to continuing our work together. We hope that will only be for a short time, though, for we believe we have it within our powers soon to whip this disease and put ourselves out of business. Help us do that.

STATEMENT OF ROGER MEYER, M.D., CHAIRMAN, DEPARTMENT OF PSYCHIATRY, SCHOOL OF MEDICINE, UNIVERSITY OF CONNECTICUT, ON BEHALF OF THE AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY AND THE COMMITTEE ON PROBLEMS OF DRUG DEPENDENCE

Senator WEICKER. Our next witness is Dr. Roger Meyer. Dr. Meyer has a plane to catch at 2 o'clock.

Dr. MEYER. Thank you, Senator.

I am representing the Committee on Problems of Drug Dependence and the American College of Neuropsychopharmacology, which I believe may be known to your members of the staff.

I would like to start, Senator, with an expression of appreciation for the leadership you have shown, and the committee, about the concern of the patient as a human being, the institutions for the retarded and mentally disabled, and the concern you have also shown for the future of biomedical research.

I was pleased to learn today we may have a tentative agreement around the proposed recision for the 1985 budget relative to NIH and ADAMHA. I think any kind of response like that is really a measure of the effort that you and the committee have made.

Senator WEICKER. I thought I had reached an agreement, and I, probably as far as the administration is concerned, am not so sure they agreed to all aspects of it. But I tell you, the more I sit through hearings such as this, the less I think I should have agreed to anything. I suppose a bird in hand is worth two in the bush, but that is neither here nor there. I think the case speaks for itself. I think the American people very frankly want their money spent on life, and that is what these stories are all about. And the fact I have to go out there and nickle and dime an administration that spends billions for death, I am not so sure it is a good agreement. I thought it was a good agreement. I think most everybody who looked at it thought it was a good agreement. It certainly came down on the side of science and NIH. I am not so sure it isn't one of these situations that shouldn't be compromised at all. We will have to see. Many more hearings like this and I think I will just take the amendment to the floor and let the Senate go ahead and do what it wants to do.

Anyway, that is inside information, but I think it is important to say because I think these hearings are just that moving as we hear from those on the front line of experience, not just sitting back here in Washington, DC, scribbling around on a piece of paper.

Dr. MEYER. Parenthetically, you make me proud to be from Connecticut.

The points that I have made in my written testimony really deal with support for the ADAMHA research budget and on the basis mainly of equity and of opportunity, and equity meaning fairness and equity meaning accumulated value and opportunity as it is spelled out in the Institute of Medicine's report, which was published in the fall of 1984. Equity in terms of fairness for the mentally ill and addicted and members of their families means, as you know, that health insurance coverage for these disorders is much more limited than for other medical disorders. Medicare, as an example, provides $250 per year for ambulatory care for its patients. And when resources are depleted, the mentally disabled and addicted add to the social welfare costs in our cities and States. When those finally fail, these patients fall between the cracks to join the growing army of the homeless. Paradoxically, it is only when patients are addicted, alcoholics, requiring medical care, that actually our coverage for health care improves.

Fairness to these patients, since we aren't providing them with fairness in terms of the support for treatment, I think surely means support for research. Between 1970 and 1980, a period of high inflation, the NIH budget increased by 125 percent. That for ADAMHA was one-third less. Between 1980 and 1985, NIH increased by 45 percent. Again, the ADAMHA budget was one-third less.

In terms of equity, in terms of accumulated value, the case for advancing our treatment opportunities, in terms of the introduction of lithium, in terms of the introduction of clonidine and naltrexone for addicted individuals, our care for alcoholics, these are all areas of improvement that have indicated that research pays off.

The case for the opportunity I think is well established. The Institute of Medicine's report supports the need for research on this frontier of behavioral neurobiology. Journals every month come out and document the research opportunities in the field of mental disorders and addictive disorders.

Your own steadfast support has given some hope to the scientific community and the mentally disabled, but a deficit created by this administration will not be allowed to be used by it to selectively alter our domestic agenda. Congressional support for biomedical and behavioral research has been firmly grounded in the mixture of optimism and idealism that has usually produced very positive results in this country.

We know you are doing everything possible to continue to strengthen these programs. The families of the addicted and the mentally disabled and the members of the scientific community are deeply grateful for your efforts.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your statement. Your statement in its entirety will be included in the record.

[The statement follows:]

STATEMENT OF DR. ROGER MEYER

My name is Dr. Roger E. Meyer. I am Professor and Chairman of the Department of Psychiatry and Scientific Director of the Alcoholism Research Center at the University of Connecticut School of Medicine. I am speaking today on behalf of two organizations who share a concern about the future of research on alcoholism, drug abuse, and the multiple forms of mental disorder. The Committee on Problems of Drug Dependence is a distinguished multidisciplinary panel that has been established under the general sponsorship of ten professional societies. For more than 30 years the committee was previously part of the National Academy of Sciences/National Research Council. It continues to advise relevant governmental and international organizations on the abuse liability and scheduling of drugs, and to sponsor the major annual scientific meeting in the field of drug abuse. The committee, therefore, has generic responsibility for encouraging scientific communication through its annual meeting and the publication of its annual monograph; and for expediting the application of scientific findings to public policy in the field of drug abuse.

The American College of Neuropsychopharmacology is an organization of 430 members from all relevant disciplines concerned about biological function in the central nervous system, and its relationship to the causes and treatment of mental and addictive disorders. The ACNP membership represents the most significant group of scientists involved in this kind of research in the United States. The annual meeting in December represents the most important forum for the exchange of scientific information that exists in this field. In addition to an annual monograph, the ACNP publishes a distinguished text every ten years which represents the benchmark of biological research on mental disorders, alcoholism and drug abuse.

I can summarize my testimony today with two words that are full of meaning for the case for full funding for the research programs of the Alcohol, Drug Abuse and Mental Health Administration: EQUITY and OPPORTUNITY.

EQUITY

Webster offers two distinct definitions of equity: fairness, and accumulated value. Both contexts are relevant in this case.

Equity (as fairness) for the families of individuals with ADM disorders means support for access to treatment -- and critical support for research that can identify promising directions for prevention and therapeutics. The treatment of these conditions, as for other chronic relapsing illnesses, may involve extended and/or recurrent periods of inpatient, partial hospital, residential, and/or outpatient treatment. Senator Weicker, your own concern for the quality of care of these patients in institutions has been critically important in drawing needed attention to the problem and is much appreciated by those of us in the field. As a general rule, insurance coverage for the treatment of these disorders is inadequate.[1] Indeed, whatever insurance coverage has been available in some of our New England states is currently being challenged by the insurance industry in a case currently before the Supreme Court. The costly burden of care for these patients falls on the patients themselves and their families to a greater degree than for most other medical conditions. When resources are depleted, these individuals add to the social welfare costs of our cities and states, or they fall between the cracks to join the growing army of the homeless. Paradoxically, it is only when some of these individuals develop serious secondary medical conditions as a consequence of alcoholism and/or drug abuse that coverage for their medical care actually improves. Fairness to these patients surely means that in the face of discriminatory health care benefits for treatment, they must be offered some hope that support for research on ADM disorders will at least be equitable compared with support for research relative to other medical conditions.

Between 1970 and 1980 (a period of high inflation), the research budget for ADM disorders increased by 87%, while the overall research budget at the NIH grew by 125%. The NIH budget continued to increase during each of the years of the Reagan administration, and the approved fiscal year 1985 budget is 45% larger than in 1980. In contrast, the ADAMHA budget fell in 1982, and the approved 1985 budget was only 30% larger than the budget for fiscal year 1980. The discrepancy in federal funding of ADAMHA versus NIH research programs is further compounded by the fact that research on cancer, heart disease and certain other disorders receive significant support from citizens' groups and others. The equity issue here is not that support for NIH should diminish, but rather that support for ADAMHA research should be increased in ways that are comparable to support for the NIH.[2]

EQUITY AS ACCUMULATED VALUE

Equity can also be considered as accumulated value. Since 1948, the total federal investment in research on mental disorders and addictive states has been substantially less than $3 billion. One recent study documented the cost savings resulting from the introduction of lithium carbonate as an effective treatment for manic depressive illness which can also prevent most recurrences. It is estimated that lithium carbonate has produced cumulative direct and indirect savings of $17 billion since its introduction in 1969. In recent years, ADAMHA-supported research has helped to develop effective treatments using drugs and/or psychotherapies for most severe depressions. We have seen the introduction of new pharmacological treatments for opiate addiction including naltrexone, a narcotic antagonist, which has been shown to be especially helpful in the treatment of addicted health care professionals; and clonidine, which has enabled physicians to treat opiate withdrawal without the use of addictive drugs. We have seen the virtual disappearance of delirium tremens as a cause of death. A recent visitor to the University of Connecticut from East German reported on the continuing high mortality from DT's in his country and other East Bloc nations. For ADM disorders, no less than for other medical conditions, we have seen the equity return on the federal government's investment in research result in major improvements in health care -- and ultimately significant cost savings. Most patients maintained on lithim carbonate do not require repeated hospitalizations for the treatment of manic and depressive episodes.

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[1] Medicare only covers $250/year of outpatient costs for the elderly mentally ill.

[2] One-hundred and seventy billion dollars was expended in the United States in 1980 for health care for the ten most costly diseases. Two billion dollars was expended in 1983 for the extramural research supported by NIH and ADAMHA. The ratio of research expenditures relative to cost of health care per disease group gives some indication that the research programs of ADM disorders are significantly under-funded compared particularly to cancer, heart disease, neurological diseases, and endocrine, nutritional, metabolic and immune system disorders.

OPPORTUNITY

The likelihood of future benefits resulting from today's research on ADM disorders is strongly supported by the opportunity for productive research in the biobehavioral sciences. This was spelled out clearly by the Institute of Medicine in its recent report entitled, "Research on Mental Illness and Addictive Disorders: Progress and Prospects." The report highlights research progress on the major psychiatric disorders, drug abuse, alcoholism and the mental disorders of children and the elderly. With regard to alcoholism, the report reaffirmed the very real opportunities for research that were highlighted by the 1980 report of another panel constituted by the Institute of Medicine. I have duplicated Table 1 from the 1984 IOM report which summarizes its major conclusions.

TABLE 1

MAJOR CONCLUSIONS

- **Mental disorders, alcoholism, and drug addictions profoundly disrupt the lives of 30 to 45 million people in the United States each year, with conservative estimates of annual expenditures for direct health care at $20 billion and of total economic costs at $185 billion.**

- **Research already has improved drug and psychosocial therapies for some mental illnesses and addictions markedly; but much work remains to establish how to prevent, diagnose, and treat many of the most disabling problems. Some illnesses, including severe childhood mental disorders, alcoholism, and schizophrenia, typically have a costly, chronic course, so even relatively small advances can result in enormous direct and indirect savings for society.**

- Research on brain function and behavior is increasingly relevant to major physical disorders that contribute substantially to the burden of illness in the United States and other developed countries. Many of these diseases arise from specific unhealthful behaviors or require active, sustained cooperation for prevention or optimal treatment.
- The amount of research on the disorders and health-related behaviors in the ADAMHA domain is much too low, given their enormous costs to society. Since 1966, the real level of federal support has dropped markedly, even as research opportunities and available scientific personnel have expanded.
- Support for ADAMHA research and research training should undergo an orderly increase over the next five years. Several lines of reasoning converge to suggest that relatively conservative appropriate targets for levels of support would be, in constant 1983 dollars:

NIAAA, $100 million; NIDA, $100 million; NIMH, $300 million.

Many of the economic costs of ADM disorders ($185 billion) represent the costs of social welfare required by this population, and lost income with consequent effects on federal and state revenue. Some of these conditions have a genetic and/or familial dimension with major implications for the next generation.

The IOM report highlights the necessary interdisciplinary perspectives that have contributed to research in these fields. Psychological and social science methods continue to be critical, while biological research has literally exploded with promise. The neurobiology of behavior has become the most exciting research frontier in the biological sciences as demonstrated by the recent PBS series on the brain. Neurotransmitters are chemicals that enable neurons to communicate with each other. In 1970 there were thought to be five neurotransmitters in the brain and that each neuron only produced a single neurotransmitter. By 1983, over 40 neurotransmitters and other types of neuroregulators had been identified within the brain, and it was learned that neuronal function was much more complicated than one neuron/one neurotransmitter. There is a great deal of excitement about our increased ability to understand the biology of brain cells and the molecular processes they use to communicate with and regulate each other. NIDA-supported research has demonstrated that the brain has specific receptors for opiates, and makes and stores substances called opioid peptides that have actions quite similar to morphine. It is very likely that this research will suggest new treatment approaches to pain relief that will not include the potential for addiction. NIDA-supported research has demonstrated that distinct classes of opioid receptors seem to mediate the analgesic vs. the euphoriant properties of opiate drugs.

Alcoholism affects multiple organ systems. Chronic alcohol use impairs brain function and most alcoholics show some degree of cognitive impairment which limits functional ability. NIAAA-supported research has documented the chronic effects of alcohol on brain function and the potential for recovery with abstinence.

NIAAA-funded investigators have determined that a potential common mechanism underlying alcohol's effects on multiple organ systems may relate to its effects on cellular membrane fluidity. These studies also suggest new ways of understanding the development of tolerance and physical dependence.

The NIMH has pioneered in supporting the development of instruments which can monitor brain function in living animals and in human beings. These methods range from studies of single nerve cells in animals, to monitoring of regional metabolic activity in human beings. Among the new research tools are the newer brain imaging techniques such as positron emission tomography (PET), magnetic resonance imaging (MRI), computerized topographic electroencephalography and computer analyzed event related electrical potentials. The latter technique has demonstrated distinct differences in offspring of alcoholics and schizophrenics which may be associated with subsequent risk of these disorders.

In a recent editorial, the New York Times asked rhetorically how many research grants were sufficient. The Institute of Medicine Report describes the need to double ADAMHA support for research over the next five years (based on 1983 dollars). Funding NIAAA research at $68.7 million, NIDA research at $79.8 million and NIMH research at $252.8 million would enable the research effort to go forward in FY '86. In the recent past, the inflationary increase in indirect costs, salaries, equipment and operating expenses has raised the costs of individual grants. In the present year, our major grants were cut 10% by the agency because they lacked adequate funds to cover obligated indirect costs on all of their awards. I have had the privilege of serving as a member and chairman of a grant review committee at NIAAA. My experience is not unlike that of other reviewers for NIDA and NIMH. NIAAA lacks funds to continue its career investigator program for new applicants. Most approved grants will not be funded. We see promising young MD's and PhD's turning away from academic research, while some established investigators turn to more predictable but directed research support from the pharmaceutical industry.

Mr. Chairman, the opportunity for research on mental and addictive disorders is substantial. The potential for return on investment is real. The excitement of the research is apparent in the enthusiasm of the producers of the PBS series on the brain, in the quality of the journalism of the science reporters for the Washington Post, the New York Times and Science Magazine, and in the optimism of the panelists for the Institute of Medicine. Your own steadfast support has given some hope to the scientific community and the mentally disabled that a deficit created by this administration will not be allowed to be used by it to selectively alter our nation's domestic agenda. Congressional support for biomedical and behavioral research has been firmly grounded in the mixture of idealism and optimism that has usually produced dramatic returns for this country. We know that you are doing everything possible to continue and strengthen these programs. The families of the addicted and the mentally disabled, and the members of the scientific community are deeply grateful for your efforts.

We greatly appreciate this opportunity to testify and I would be pleased to answer any questions.

STATEMENT OF MIKE GEMMEL, PRESIDENT, COALITION FOR HEALTH FUNDING

Senator WEICKER. Mr. Gemmell, president of the Coalition for Health Funding.

Mr. GEMMELL. Thank you, Mr. Chairman. Once again we are grateful for the opportunity to appear before the subcommittee to testify on behalf of the Coalition for Health Funding. Our entity is comprised of 40 organizations concerned with all aspects of health programs. In fact, Mr. Chairman, I have attached a list of members to the summary statement.

We first of all want to thank you for your current efforts to restore health professions funding and NIH and ADAMHA research grants in the Senate budget resolution. It is reassuring to know we have strong support in the Senate during these difficult times.

We will submit as an addendum to this testimony a fairly complete list of programs of concern to us and for which we will be offering our funding recommendations for fiscal year 1986.

With your permission, we should take a few moments to raise a salient point of central concern to us and others like us about what the Office of Management and Budget has termed the nondefense discretionary programs.

We know that the law requires that the interest on the debt be paid, that entitlements programs were created entitlements for a good reason, and that it is imperative for the most powerful Nation in the free world to maintain its military capacities. Still, the programs that most directly benefit and are depended upon by the elderly, the very young, the poor, and the programs that most directly enhance the quality of life for all Americans—such as those targeted to the prevention and cure of disease and disability, especially the new ones like CDC, Center for Health Promotion and Disease Prevention, and the education and health of our youth, like the emergency medical services for children that you and Senator Inouye are so concerned about—are very vulnerable to the OMB ax.

CHF respectfully urges you as our recognized advocate and members of your subcommittee to support your fiscal year 1986 funding. What is left for us now? I will tell you, to put it most bluntly, but with no disrespect or impertinence intended, we beseech the subcommittee to avoid what appears to be developing in the Congress, that is an abdication of genuine fiscal responsibility and an escape into politically simplistic actions. We know that these are harsh terms and you deserve an explanation.

As you may recall, late December, only a few years ago, the Congress found itself at loggerheads with a President who refused to accept the continuing resolution and vetoed it. Prior to the veto, it had been a long and difficult session and the prospect for convincing the President of the necessity to go along with the Congress' figures seemed dim. However, out of thin air, a quick and dirty solution was struck: All of the programs in that continuing resolution would be cut by 4 percent in exchange for the President's signature. It worked. The bill was signed.

There are many ways to characterize this type of a solution to a difficult problem. Sometimes it is dubbed an across-the-board cut and sometimes it is called a freeze. We grant that in certain instances such measures have to be used to accomplish a particular and justifiable objective. But more often than not, such solutions are really what is derogatorily termed a quick fix.

But as you know, Mr. Chairman, everything is not as important or unimportant as everything else. Unfortunately, we see this picture of fiscal irresponsibility upon us again. Thus, in summary, we ask in reaching your determinations that you look with much favor on our recommendations for health programs. We know that you may decide the dollars are not there to be as responsive as you might like. However, we ask you then to reject the current fashion of freezing programs across-the-board without regard for their relative merit and significance. We ask you to maintain your extraordinary record of support developed over the years in the exercise of programmatic as well as political judgment.

The Coalition for Health Funding thanks you, Mr. Chairman.

PREPARED STATEMENT

Senator Weicker. Thank you very much. Your comments in their entirety will be placed in the record. Thank you.

[The statement follows:]

Statement of Mike Gemmel

in, we are grateful for the opportunity to appear bcommittee to testify on behalf of the Coalition nding, an entity comprised of forty organizations h all aspects of health programs, including aining and services.

the past several decades has the federal ecognized the significant role it plays in, and ity it has for, creating and enhancing the wide alth programs we now enjoy, and that have led to icant benefits for our citizenry at large. In rs, however, particularly since 1980, support for ese programs has been disparate; some programs have been cut back or eliminated while others have been sustained and -- measured in current dollars -- enlarged.

The constitutional process requires that many subcommittees, committees and parts of the executive leadership of our government play significant roles in the development of Federal health programs. But, none has played a more essential role from the perspective of the testimony we offer this morning than your own subcommittee. It is generally in this jurisdiction of the legislative process where informed judgment takes place and where the hard choices are made.

Submitted as an addendum to this testimony is a fairly complete list of programs of concern to us, and for which we offer our funding recommendations. But, with your permission, we wish to take a few moments at the opening of testimony to raise a salient point and central concern for us, and others like us, about what the Office of Management and Budget refers to as "non-defense discretionary" programs.

OMB's own numbers show that since 1980 when you divide the federal budget into the well known pie charts -- defense, interest on the debt, entitlement programs, and the non-defense discretionary programs -- you find the latter group received approximately 23% of the budget in 1980 and approximately 18% in 1985. Since one percent of the budget today equals more than $9 billion dollars, this 5% reduction means that the federal share for health, education, transportation and housing programs has dropped by about $45 billion below what it would have been at the distribution ratios existing less than five years ago.

We know that the law requires that the interest on the debt be paid, that entitlement programs were created entitlements for a good reason, and that we live, tragically, on a planet where it is imperative that the most powerful nation in the free world maintain its military capacities. Still, the programs that most directly benefit and are depended upon by the elderly, the very young, the poor, and the programs that most directly enhance the quality of life for all Americans -- such as those targetted to the prevention and cure of disease and disability and the education of our youth -- these programs, according to OMB's own analysis, have already paid their dues, or as another cliche would have it, they already gave at the office.

Our main point, however, is not that there should be no further cuts in discretionary programs: Obviously we believe that. Further, we have reason to believe that were it within your power to prevent any further reductions in programs you would exercise that power. Your demonstration of strong support for health and human service programs, be it in your markups or in your floor presentations to your colleagues in the Senate, suggest that we are correct when we think of you as an advocate. We must recognize, however, that these are not usual times. Two hundred billion dollar deficits for several years running can hardly be called typical. And, while we hear the debates between the economists, bankers, statesmen and others over what the implications of these deficits may be, all agree that record high deficits will at some point prove devastating to everyone in this Nation.

What is there then left for us to call upon as we testify before you? To put it most bluntly, but with no disrespect or impertinence intended, we beseech you to avoid what appears to be developing in the Congress, that is, an abdication of genuine fiscal responsibility and an escape into politically simplistic actions. We know that these are harsh terms and we owe you an explanation.

As you may recall, only a few years ago, in late December, the Congress found itself at loggerheads with a President who refused to accept a Continuing Resolution and vetoed it. Prior to the veto it had been a long and difficult session and the prospect for convincing the President of the necessity to accept the Congress' figures seemed very dim. However, seemingly out of thin air, a quick and dirty solution was struck: All of the programs in that Continuing Resolution would be cut by four percent in exchange for the President's signature. It worked. The bill was signed.

There are many ways to characterize this type of a solution to a difficult budget decision. Sometimes it is dubbed an "across-the-board" cut, sometimes it is called a "freeze," and, on the other side of the ledger, it is known as a "surtax." We grant that in certain instances, in the interest of time or under pressure of extraordinary circumstances, such measures have to be used to accomplish a particular and justifiable objective. But, more often than not, such "solutions" are really what is derogatorily termed a "cop-out." Everything is not as important or unimportant as everything else -- certainly not in the complex federal budget. In terms of the four percent cut I referred to, Congress, in the interest of time and its own sanity, might very well have had no choice but to accept that across-the-board cut. But, had the same action been taken two months earlier there would have been time for the Congress to exercise its authority and its responsibility for judgment, and to decide, for example, that in terms of the immediate needs of the Nation, NIH should receive only a two percent cut or could absorb a six percent cut, that health manpower programs should be slashed or receive a major increase, and so on down the line.

Unfortunately, we see this specter of fiscal irresponsibility upon us again. In recent weeks, on the floor of the House, a number of authorization bills for science agencies have been voted on with alarming results. Specifically, the House voted to freeze funding for the National Science Foundation. Fortunately, because of his legislative ability and the respect in which he is held, the Chairman of the Committee managed to retain the right to determine how the frozen funds should be distributed in order to prevent national objectives from being skewed by a zealotry lead to panic to deal with the deficits. However, the fact remains that this simplistic approach to complex budgetary decisions attracted a signficant amount of support from people who should know better.

All of us have read endless articles in the press and the journals about how to deal with the deficit. We can offer all sorts of commentary, but we recognize the burden will fall upon you. Thus we ask that in reaching your determinations you look with much favor on our recommendations for health programs. We know that you may decide the dollars are not there to be as responsive as you might like. However, we ask you then to reject what appears to be developing into a current fashion of freezing programs across-the-board without regard for their relative merit and significance. We ask you to maintain your extraordinary record of support developed over the years in the exercise of programmatic as well as political judgment.

STATEMENT OF LEON JACOBS, PH.D., CHAIRMAN OF THE BOARD AND PRESIDENT, GORGAS MEMORIAL INSTITUTE OF TROPICAL AND PREVENTIVE MEDICINE, INC.

Senator WEICKER. Next we have Dr. Leon Jacobs, chairman of the board and president of the Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc.

Dr. JACOBS. Thank you, Mr. Chairman. I will try to be as brief as possible and just highlight a few things that are of considerable importance.

First of all, we are not asking for any considerable sum of money more than what is being requested by the administration this year—$1,000—to tidy up our appropriation to $2 million, which is the limit of our authorization.

You will recall that a couple of years ago there was a chance we would go out of business entirely because our appropriation was eliminated from the National Institutes of Health request. Because of your own vision and that of your colleagues in the Congress, we are still extant.

I want to tell you now that we are doing relatively well. We are very closely guarding our core funds and doing the best we can to repay a debt of half a million dollars to the Panamanian Society Security Agency, which carried us over a very difficult period in 1983.

We have been following the recommendations of the Office of Technology Assessment report, which you asked for, and the General Accounting Office report, which you also asked for. We have looked at the possibility of private fundraising. We hired a private fundraising consultant and he has examined this and he has stated in effect that we should look for individual project support. My answer to that is that we have always looked for individual project support, and we have been in the past successful and are at present successful, to the extent we have about $1,030,000 in grant and contract support for a wide range of projects, 13 different projects in our laboratory in Panama.

This does not make us at all complacent because grant support fluctuates all the time, with all the competition, and with the vicissitudes of NIH funding and the funding done by other agencies.

So we are trying again to increase our capabilities in fund-raising and in various kinds of project support. For instance, we have a wide range of projects which are no longer to be considered only tropical diseases but which I call diseases that occur in the tropics. We have a great deal of respiratory disease and disease due to the human T-cell leukemia virus, one form of which is the cause of the acquired immune deficiency syndrome [AIDS]. Some of these projects do not get funded. Some of our projects which get high priorities on review do not get funded because there just isn't enough money, even though they are approved at relatively high priority. For those purposes we use the core support which is available because we do have to maintain competence in a whole variety of different disciplines in the tropics.

PREPARED STATEMENT

Senator **Weicker**. Your statement in its entirety will be included in the record.

Dr. **Jacobs**. Fine. Thank you.

Senator **Weicker**. Thank you very much.

[The statement follows:]

STATEMENT OF DR. LEON JACOBS

Thank you for the time given me for this presentation.

I am Leon Jacobs, Chairman of the Board of Directors of the Gorgas Memorial Institute, Incorporated (GMI). My curriculum vitae is attached to my written statement.

My purpose today is to request, for the Gorgas Memorial Institute and Laboratory, the sum of $2,000,000 (two million dollars) for fiscal year 1986. Two million dollars is the total amount authorized by the Congress under the provision of P.L. 70-350, as amended. The administration request for the Gorgas Memorial Institute, contained in the Fogarty International Center, NIH, request is for $1,999,000; $2 million tidies the figure up, and the one thousand dollars increase will be very useful.

On 27 February of this year, the GMI held the annual meeting of its Board of Directors. A copy of my report to the Board was sent to you soon thereafter; so you are already aware of the progress GMI and its Laboratory in Panama have made in the last year. It is proper to reiterate here that this progress was possible only because the Congress restored our funding for fiscal year 1984 and enhanced the funds in fiscal 1985. I wish now to emphasize a few important points mentioned in the report to the Board.

1) We are carefully managing our core funds, so that we can amortize our debt of $500,000 to the Social Security of Panama on schedule. The schedule requires payment of $50,000 every 6 months, starting in November 1985.

2) We have been successful in gaining support for new projects. At present, the Gorgas Memorial Laboratory has thirteen projects that are receiving funding from various sources. The major ones, from a financial standpoint and of course in respect to the personnel and other resources involved, are the malaria drug evaluation project financed by the U.S. Army; the human T-cell leukemia virus study supported by the

NCI; the NCI-supported study of cervical cancer in Latin America, for which GMI/GML is the prime contractor; a subcontract with the Ministry of Health of Panama on malaria and leishmaniasis, funded by the Inter American Development Bank; and the U.S. Navy training enterprise. All the projects, even the smaller ones financially, are important to our mission. These include clinical trials of drugs against dermal leishmaniasis; study of blood meals of triatomid bugs; other work on the epidemiology of Chagas' disease; acute respiratory disease investigations on etiology, epidemiology, and control; the continuing project with the Yale arbovirus unit on these viruses in tropical ecosystems; and a new project with the University of Panama on arbovirus transmission, funded by the BOSTID program of AID/NAS. The total funding of these projects comes to slightly over one million thirty thousand dollars. They are a demonstration that the GML is capable of obtaining funding for individual projects. We do this relatively well when funding sources are available. When the resources of research-funding agencies are restricted, we find it necessary to rely more on our core support, as was the case just a few years ago.

It is important to elaborate on this issue. Some of our projects, such as the acute respiratory disease study (which receives some modest support from the Pan American Health Organization) and a new one in arbovirology receive high marks from individuals who review them. They nevertheless do not get full funding because of the vicissitudes of the funding system. When the National Institutes of Health is required to change the method of funding grants from year-to-year obligations to full-term (say 3-year) obligations, many projects that receive high priority scores remain in the category of "approved but not funded." Our job, as managers of our small research enterprise, is to make certain that we utilize our basic support in such a way that high quality work can be prosecuted, and the expertise for such work can be maintained, when factors beyond our control limit the available resources. Moreover, not all laboratory work is glamorous or highly competitive, but it is basic to maintaining competence; we must see that these skills remain available.

3) We are becoming capable of much closer scrutiny of the core support expenditures attributable to the different divisions and departments within the GML. The GML is now launched on a computerized financial management system which is at present being "de-bugged" and should be the routine in the near future. The equipment in GML and GMI in Washington will allow rapid communication.

These developments are important, because our cervical cancer contract with the National Cancer Institute includes three sub-contracts with organizations in Colombia, Costa Rica, and Mexico. The GMI office in Washington is involved in management of financial matters and reports of the subcontractors. A sophisticated system is the only way that these tasks can be accomplished.

4) We had one site visit in November 1984, sponsored by the Fogarty International Center, to examine the parasitology programs of GML. The report is generally favorable and constructive. Another visit, on epidemiology and virology programs, will occur in August, 1985. A meeting of the Advisory Scientific Board is being organized for August or September of this year. Thus, we are following the recommendations of the OTA and GAO reports of 1984, to utilize our advisory apparatus.

5) GMI and the University of Alabama at Birmingham have completed an agreement for a collaborative relationship. The agreement provides opportunity for joint research and training. We have also had GML staff members visit at Louisiana State University; with the objective of reactivating the long standing collaborative relationship with that institution.

6) The future presents a series of challenges. While we

have a more stable financial base than we have had recently, we must make wise investments in personnel and equipment to remain competitive and to enhance our productions. We must do a great deal to improve our facilities and this will be the focus of our fund-raising, in which we will invest cautiously as we develop our long-range program. This program will include not only high quality research but training, in collaboration with U.S. institutions and with institutions in countries in the Latin American and Caribbean regions.

I want to emphasize the training component. The Executive Committee firmly endorses the concept that the GML should, through its current collaborative arrangements and by other means, become involved in more activities involving trainees and visiting investigators. There is a synergism between research and training which results in the generation of new concepts and new approaches. This is especially important in laboratories that are distant from major centers of research in highly developed areas. GML can contribute to young scientists and health practitioners by providing them with experiences in coping with tropical health problems. Staff at GML can benefit from the perceptions and help of students. We envision GML as a place where there can be considerable interaction among scientists of many parts of the Americas, providing opportunities for them to work together for the common good. The Isthmus connects the continents, GML should be able to connect the minds.

To do this we will need improvements in our physical plant, and in our library and its resources. We will need dormitory facilities, for example, and additional laboratory space, as well as a new library. This concept will be a major component of our approach to fund-raising. We will not depreciate our research endeavors, but rather we hope to spark them.

Mr. Chairman, in a very diminutive way, the recent history of the GMI/GML is like that of the Chrysler Corporation. Both were rescued by the Congress from near disaster. Both have attained stability. Both have to embark on new programs to assure profitability in the future. The likeness is between the institutions, not the chairmen of the boards.

Thank you very much.

CURRICULUM VITAE

Name: Leon Jacobs

Address and Telephone Number:

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Washington, D.C. 20015

Phone: 202/966-2674

Date and Place of Birth:

March 26, 1915
Brooklyn, New York

Educational Background:

Boys High School Brooklyn, New York		1927-1931
Brooklyn College Brooklyn, New York	B.A.	1931-1935
George Washington University Washington, D.C.	M.A.	1936-1938
George Washington University Washington, D.C.	Ph.D.	1939-1943 1946-1947
Tissue Culture Course, Mary Imogene Bassett Hospital, Cooperstown, New York		7/49-9/49
Course in Virology, U.S. Department of Agriculture Graduate School, Washington, D.C.		1949
Course in Ophthalmic Pathology, Armed Forces Institute of Pathology, Washington, D.C.		2/9-13/53
Course in Pathology, U.S. Department of Agriculture Graduate School, Washington, D.C.		1953
Course in Veterinary Pathology, Armed Forces Institute of Pathology, Washington, D.C.		1959

Professional Experience:

Junior Nematologist to Protozoologist, Division of Zoology, NIH	1937-1943
United States Army	1943-1946
Protozoologist to Scientist Director, NIAID, NIH	1946-1956
Head, Section of Protozoal Diseases, Laboratory of Tropical Diseases, NIAID, NIH	1956-1959
Chief, Laboratory of Parasitic Diseases, NIAID, NIH	1959-1964

Acting Scientific Director, NIAID, NIH	1964-1965
Scientific Director, DBS, NIH	1966-1967
Deputy Assistant Secretary for Science, DHEW	1967-1969
Assistant Director for Collaborative Research, NIH	1969-1972
Associate Director for Collaborative Research, NIH	1972-1978
Director, Fogarty International Center, NIH	1978-1979
Visiting Prof. of Microbiology, University of Arizona Medical School	1979-1981
Visiting Prof. of Microbiology, University of So. Florida Medical School	1980-1982
Scientific Director, National Society for Medical Research, Washington, D.C.	1981-1982
Scientific Consultant, National Society for Medical Research, Washington, D.C.	1983-

Membership in Scientific Societies:

American Society of Tropical Medicine and Hygiene	
Editor, Tropical Medicine News	1952-1955
Representative to National Research Council	1957-1961
Council	1964-1968
Vice President	1970
American Society of Parasitologists	
Editor, Journal of Parasitology	1955-1958
Chairman, Committee on Business Operations	1959-1960
Council	1963-1966
President	1978
American Association of Immunologists	1956-1980
Helminthological Society of Washington, President	1950
Tropical Medicine Society of Washington, President	1971-
Society of Protozoologists	1955-1980

American Association for the Advancement of Science

Sigma Xi

New York Academy of Sciences

Research Interests:

Cultivation, epidemiology, and pathogenicity of parasitic protozoa; immunology and serology of protozoan and helminthic infections. Particularly interested in toxoplasmosis (life cycle and epidemiology, immunity, diagnostic procedures, ocular and other clinical manifestations and serology.)

Professional Publications:

Bibliography attached.

Other Activities:

Lectures at Johns Hopkins University School of Hygiene and Public Health	1956-present
Lectures at Georgetown University Medical School	1965-1968
Lectures and laboratory teaching of parasitology at Western Reserve University Medical School	1954-1958

Representative of the American Society of Tropical Medicine and Hygiene to the National Research Council	1957-1961
Consultant, Committee on Uveitis, American Academy of Ophthalmology and Otolaryngology	1957-1958
Chairman, Committee on Cooperative Publication, Conference of Biological Editors	1958-1960
Director and member of Executive Committee, Gorgas Memorial Institute	1969-1979
Chairman, Toxoplasmosis Sessions, 7th International Congresses on Tropical Medicine and Malaria	1963
Member, Executive Committee, Commissioned Officers Association of the U.S. Public Health Service	6/65
Member, WHO Expert Panel on Parasitic Diseases	
Chairman, Panel on Parasitic Diseases, U.S.-Japan Cooperative Medical Science Program	1965-1970
Member, Microbiology Subcommittee, Safe Drinking Water Committee, National Academy of Sciences	1976-1977
Chairman, Subcommittee on Research, U.S-Egypt Joint Health Working Group	1977-1979
Member, Board of Directors, Gorgas Memorial Institute of Tropical and Preventive Medicine, Incorporated	1969-
President and Chairman of the Board, Gorgas Memorial Institute of Tropical and Preventive Medicine, Incorporated	1983-
Adjunct Professor of Preventive Medicine, USUHS	1985-

Honors and Awards:

Army Commendation Ribbon	1945
Past President, Helminthological Society of Washington	
Biological Sciences Award of the Washington Academy of Sciences	1954
Arthur S. Flemming Award of the Junior Chamber of Commerce	1954
Brooklyn College Distinguished Alumnus Award	1955
Barnett Cohen Award, Maryland Society of Bacteriologists	1956
Fulbright Research Scholarship	1960-1961
Guggenheim Fellowship	1960-1961
Council, American Society of Parasitologists	1963-1966
Henry Baldwin Ward Medal of the American Society of Parasitologists	1963
George Washington University Alumni Achievement Award	1967
Distinguished Service Medal, USPHS	1966
Superior Service Award, DHEW	1968
Vice President, American Society of Tropical Medicine & Hygiene	1970
President, American Society of Parasitologists	1978

STATEMENT OF GEORGE MANDEL, PH.D., AMERICAN SOCIETY OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

Senator WEICKER. Dr. George Mandel, American Society of Pharmacology and Experimental Therapeutics.

Dr. MANDEL. Mr. Chairman, thank you for the opportunity of allowing me to speak. I am professor of pharmacology and chairman of the Department of Pharmacology of the George Washington University Medical Center. Today I am representing ASPET, which is the American Society of Pharmacology and Experimental Therapeutics.

We as a group are interested in drug research and the development of nutrition to help treat disease. We support a number of other biomedical organizations that have come out for funding for biomedical science, particularly the R–01 and P–01, the research investigator initiative programs and projects. So we feel this is actually the one area where aid is most important.

We feel that the R–01's and P–01's are the most important aspect of funding at this point. We agree with the ad hoc group for medical research and also FASEP that at least 6,500 grants should be supported. However, we feel more strongly, and actually feel that it should be 7,500, because that is about 50 percent of all the approved grant applications.

I have a chart here, Mr. Chairman, which shows what has been happening over the years. You can tell that although originally that number was about 90 percent of approved applications, it has been slipping down steadily and it is now in the neighborhood of 30 percent. We feel that this is creating a great number of problems in some of these grants. We feel that at least 50 percent of these should be funded because that gives the investigator about a 50 percent chance of being successful.

I would like to stress very briefly some of the problems happening recently because we have not been able to reach that particular number. Let me give you an example from the report from the National Academy of Sciences. You may not be able to read these numbers, but they are in the text I have submitted.

The number of first-year graduate enrollments in the biomedical sciences has been slipping steadily. It used to be close to 10,000. Now it is down to 8,000. That is because these people realize it is very difficult to get research support and, therefore, they have decided to go into other fields.

Interestingly enough, when you look at college students, they also get the same message, that a field of biomedical innovation is less interesting and less supportable than business, for instance.

Here is a chart again from the National Academy of Sciences which shows here is the total number of college students and the number of people going into biomedical sciences has been slipping in the last couple of years. It is actually an account of how much they have been going down. Whereas people going into business and management, whom we need also, has been going up. But there is a great disproportion, as you can tell.

So we are concerned that a major effort then should be made at restoring a good number of R–01's and P–01's, and we feel 7,500 is the number we have been campaigning for. If we don't do that, there are a number of serious things that are happening already. There is a dissipation of a talent pool. There is also the problem within the various universities. I see this in my own department, that some of the very senior people are no longer being funded because there is not enough money to go around. Their talents are wasted. They are very capable people. Junior people, on the other hand, may still be funded, but I think they are going into safe research; in other words, less innovative, but something that will produce publications because they know then they will have a chance of being funded the next time.

I think what this country needs is creativity in research, and I think I see a limit on this. I will be very brief and just mention this. You are already aware of the fact that research has produced marvelous results in health, cancer, cardiovascular disease. It has been a very excellent investment. I might add, since I am personally involved in being a patient for this, bypass surgery has made it possible for many people now to lead normal lives.

So we are afraid that unless we restore our preeminence in science, there will be slippage to other countries, and that would be very tragic.

Our recommendation then is to fund approximately 50 percent of the approved applications, so for the NIH that would be about 7,500, and we feel for ADAMHA major emphasis should be there to approve 50 percent of the total or 680 grants.

We appreciate all of the work you have done.

PREPARED STATEMENT

Senator WEICKER. Thank you very much. I very much appreciate your comments.

[The statement follows:]

STATEMENT OF DR. GEORGE MANDEL

I very much appreciate the opportunity of testifying in front of the Senate Appropriations Subcommittee on behalf of the American Society for Pharmacology and Experimental Therapeutics (ASPET). I am currently the coordinating co-chairman of the Public Affairs Committee of our Society which represents about 3700 members. I am also Professor of Pharmacology and chairman of the Department of Pharmacology of the George Washington University Medical Center, Washington, D.C.

We wish to thank you for your past support of biomedical research. Your effective leadership and that of the Subcommittee has been pivotal in the scientific advances that have occurred over the years. That is why I wish to testify before you now. We fully subscribe to the funding recommendations of the Federation of American Societies for Experimental Biology of which we are members, but we wish to express our especially strong conviction regarding additional research support we feel is necessary.

At the present time, we are extremely concerned about the ill advised action of the Office of Management and Budget, which is a functional rescission and has prevented the implementation of the FY1985 appropriations for some 6500 new and competing research grants for the NIH. This number was arrived at as a compromise between the House and the Senate Appropriations Committees last October, and was signed by the President. It represented a consensus of the many viewpoints as to what is a reasonable level for biomedical research effort, and is a meaningful compromise between the scientific opportunities that can be realized at this time, and what the country can and should afford on behalf of the nation's health research efforts. As a member of the scientific community I was pleased that the Senate and the House of Representatives had aimed specifically to increase the number of new starts in investigator initiated research projects. This increase has been long overdue, and can be expected to accelerate the war against disease and the investment in the future of U.S. biotechnology.

As members of the Pharmacology Society we had been active in making a strong case for additional funding of R-01 and P-01 grants for FY1985. Delegations of ASPET members have met with members of both the House and the Senate Appropriations Committees, and we have argued for the implementation of 7500 new and competing research grants for FY1985. This number still represents less than 50% of peer reviewed and approved grant applications, but would assure that almost half of the highly rated projects would be given a chance to succeed. This award rate has not occurred since 1979, even though in the 1960s and early 1970s the rates were usually closer to 90% (see table 1, attached). We were delighted, therefore, that the Congress was in agreement with our concerns about the need for additional support for biomedical research, especially as represented in the R-01 and P-01 applications. We understand the other national priorities that prevented the final bill from meeting our exact goals of 7500 new and competing NIH grants.

TABLE 1

Percentage of Scientifically Approved Research Grants Awarded by the NIH from 1964 - 1984+

Fiscal Year	Council Recommended for Approval	Awarded	% Awarded
1964	4,490	3,990	89
1965	4,535	4,060	90
1966	4,900	3,740	76
1967	5,140	4,340	84
1968	4,720	3,200	68
1969	5,075	3,450	68
1970	5,170	2,750	53
1971	5,610	2,770	49
1972	6,008	3,625	60
1973	6,631	2,595	54
1974	7,061	4,540	64
1975	7,510	4,663	62
1976	7,162	3,463	48
1977	9,851	3,840	39
1978	11,251	5,200	46
1979	11,208	5,944	53
1980	11,220	4,785	43
1981	12,939	5,109	40
1982	14,396	5,109	37
1983	14,479	5,389	37
1984	14,739	5,493	37

+ Extracted from 1972 to 1984 NIH Data Books Prepared by the Office of Program Planning and Evaluation and the Division of Research Grants

In making the case for the 1986 budget appropriations we again believe that our target of 7500 grants is realistic and fully supportable and represents a responsible assessment of an appropriate level of research effort by the Federal Government at this time. Let me mention a few of the reasons on which we base our recommendation.

- Our recommendation promotes the nation's health and productivity, and the future is promising. The Administration's ceiling of 5000 or even 5500 new and competing grants has placed an undesirable limit on our scientific working capacity and therefore has delayed the discovery of new approaches to the treatment of disease. Our country has prided itself in its major accomplishments in science, and our successful efforts in biomedical research have had enormous impact on the nation's health. The major reductions in mortality from cardiovascular diseases, due in large measure to our better understanding of cardiovascular physiology and pathology, the role of nutrition and the development of new drugs, is just one striking example resulting from these efforts. The availability of new treatments for cancer has permitted many patients to live well beyond their previous expectancies, and especially younger patients now have a better chance of recovery from this dread disease. With the decrease in morbidity, these individuals can be expected to lead productive lives and to contribute to our national economy.

These successes have brought enthusiasm and excitement to the scientific community, and the likelihood of greater accomplishments is undeniable. The unrealistic ceiling of 5500 new grants, as proposed by the Senate Republicans/Administration Deficit Reduction Plan of April 15, stifles these opportunities, and we owe it to our citizens afflicted with diseases to provide strong efforts to reduce their suffering.

- Our recommendation provides for an excellent financial investment in our future. Our strong support of basic research has been responsible for the development of many new industries which now flourish, based very frequently upon unforeseeable applications of what at times even appeared as only routine discoveries. For instance, contributions from enzymology and the biochemistry of DNA have helped shape the technology of biomedical engineering and recombinant DNA, a new and exciting field which not only provided new frontiers in the treatment of disease and the production of foodstuffs, but has spawned a multi-billion dollar industry, which also improves our competitive position in international trade. The early recognition by biomedical scientists of the potential for storing and processing scientific data and the need for instruments interacting with other laboratory equipment led to NIH support of the Laboratory Instrument Computer (LINC) which had enormous impact not only on biomedical research but helped to introduce the commercial development of the now immense computer industry. The Digital Equipment Corporation is merely one such company that owes much of its success to this particular investment in biomedical research by the NIH. Exactly one month ago the first major report appeared in the New England Journal of Medicine on the initial successes of plasminogen activator in restoring cardiac circulation within a few hours following a heart attack. This research result hopefully will continue to provide new hope for a successful advance against this major cause of death or prolonged disability and career limitation involving more than one million U.S. citizens annually. I shall cite only one other success of biomedical research but it happens to be very important to probably a million Americans, including me personally. Research in cardiovascular surgery has permitted great increases in the quality of life. Following my quadruple coronary bypass surgery, I now function at my normal level of professional activity and am able to testify before you.

Altogether, it has been shown time and time again that a financial investment in biomedical research is one of the soundest expenditures that can be made, and in the past its returns have been more than 10 fold and sometimes 100 fold.

- We must maintain our country's tradition of strong leadership in and dedication to biomedical research. Unless we meet the needs for adequate funding, it will become increasingly difficult to maintain our nation's momentum in scientific discovery, and we shall have to relinquish our leadership to other countries which are increasing their efforts in biomedical research. More and more of the best scientists from other countries have been coming to the U.S. for training because of our strong dedication and leadership in biomedical research which began in the 1950s and '60s. Because of the long lag time, these programs have been paying off in the 1970s and '80s. The return of these scientists to their native countries where new opportunities for funding now exist should sound a warning that our indisputable leadership in biomedical innovation will be passed on to other nations. We have seen the implications of our slippage in many other industries in which the U.S. used to excel but where our unwillingness or inability to compete creatively has resulted in tremendous hardships for many of our nation's workers.

- The recent slack in funding has discouraged recruitment of future scientists.

Our failure to provide adequate funding for biomedical research has disheartened young scientific investigators and has persuaded others from entering this exciting and desirable career. As members of the Committee on National Needs for Biomedical and Behavorial Research Personnel of the National Academy of Sciences, we have recently uncovered data that fewer scientists are now matriculating into our biomedical Ph.D. programs (Table 2, attached) and at least equally serious, that there has been a sharp decline of college students chosing a bioscience career tract (Figure 1, attached). Since it usually takes about a dozen years of post-high school education to prepare for a research career, it will not be long before our nation's scientific talent pool will dry up and we will not be able to replenish that pool in time to maintain the momentum of our scientific research. The obvious discouragement resulting from the inability to attract research support has become evident to our younger generation who sense that innovation is a less appreciated career objective than commerce or business. It does not take long to dissipate our talent pool of bench scientists, but it will be slow and expensive to reestablish it once we again recognize its value.

Table 2

First year graduate enrollments in the Biomedical Sciences

FY	#
1975	9382
1976	9918
1977	9763
1978	9612
1979	8836
1980	8348
1981	8279
1982	8105
1983	8043

Data from Committee on National Needs for Biochemical and Behavioral Research Personnel, Institute of Medicine, National Academy of Sciences

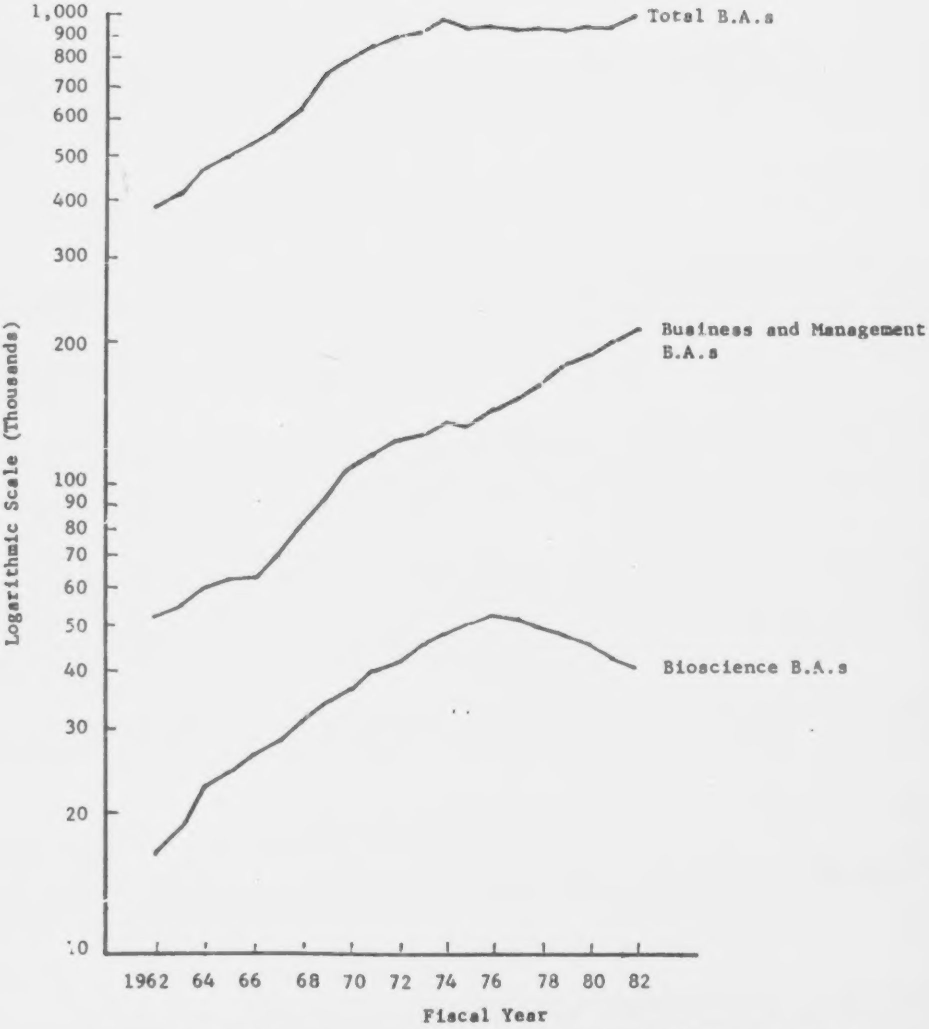


Figure 1: Bachelors degrees awarded in bioscience fields compared to business and management B.A.s and total B.A.s, 1962-1982. From the Report of the Committee on National Needs for Biomedical and Behavorial Research Personnel, Institute of Medicine, National Academy of Sciences, 1984.

- The dangers of curtailing many of the more ground breaking projects will limit creativity. Let me also address the problems that now exist in our academic institutions and research centers which depend on the Federal Government for research support. The fact that most NIH grant applications are not funded means that an increasing percentage of our research investigator pool, our nation's greatest strength which has taken so long to develop with previous NIH funds, now is no longer productive in research. Those scientists often represent the more senior and experienced investigators, whose talents are now wasted. In addition, younger researchers who wish to succeed in the academic tenure system as a rule cannot undertake "high risk" research, i.e., imaginative projects for which the pay off may be immense but which also may be totally unproductive. There is now a major concern that with more limited funding, there will still be many publications but a more severe limitation in true creativity. Since in basic research one cannot predict which investigational approach will turn out to be the most rewarding, many high quality projects will remain unfunded. Yet, many of these denied projects may be the cornerstones upon which future ideas will depend.

Recommendations

Since there are about 17,000 approved new and competing research grant applications at the NIH annually, we recommend that every effort be made to fund about 50% of them, and that is why we feel that the FY1986 budget should provide for at least 7500 such new starts, and it should state so clearly in the appropriations bill. For ADAMHA, funds should provide for 680 new and competing research grants which also represents about 50% of the total approved applications. Even if 50% of approved applications are funded, there will still be a large number of high quality applications for necessary biomedical research for which money will not be available.

We recognize the many important needs that must be considered in making up the budget but feel that the basic biomedical research effort deserves the highest national priority, no less than that for national defense, because of its undeniable contribution to the nation's health, financial growth, productivity and biotechnological leadership.

We appreciate the opportunity to testify and I would be happy to answer any questions. Thank you very much.

STATEMENT OF JOE W. GRISHAM, M.D., PRESIDENT, FEDERATION OF AMERICAN SOCIETY FOR EXPERIMENTAL BIOLOGY

Senator WEICKER. Next we have Joe Grisham, president of the Federation of American Society for Experimental Biology.

Mr. GRISHAM. Mr. Chairman, FASEB is a nonprofit organization whose purpose is to disseminate new knowledge in the life sciences through the meetings and publications of its 28,000 members who are all working scientists at the important research, education, and clinical centers throughout the United States. Our membership has been awarded over 106 Nobel prizes over the years.

On behalf of the FASEB members, I want to congratulate you and thank you and your colleagues on the subcommittee for your past and continuing support for research that means so much to our citizens and, indeed, to the people throughout the world. Truly this subcommittee can take much credit for the many life-saving advances that have been achieved by research over the years.

The support of basic research is clearly and effectively best articulated by support initiated by investigators. These grants explore questions on the cutting edge of research and are the means to treat and successfully cure diseases.

In an attempt to show commitment to research as a high priority, the President's Special Analysis K of the fiscal year 1986 budget states: "The 1986 budget continues this administration's emphasis on the importance of basic research across all scientific disciplines even in a time of budget restraint." Yet the Office of Management and Budget proposes to cut fiscal year 1985 NIH new and competing grants from the congressionally allowed level of 6,526 to 5,000 and to multiyear fund a portion of the grants.

The administration's unfortunate decision is compounded by its budget request for fiscal 1986 which proposes a spending plan of $4.85 billion, a 5.8-percent reduction from the fiscal 1985 appropriation of $5.1 billion. Again, the administration requests only 5,000 new and competing grants.

The administration refers to this lowered level as necessary to maintain stability of funding for biomedical research. In reality, the proposed 5,000 grant level, locked in for several years, would simply reinstate an artificial support ceiling that would further impede research progress in the basic life sciences.

Mr. Chairman, we have been following your determined efforts to counter the OMB decision and commend you for your diligence and your commitment to this effort. FASEB and the ad hoc group for medical research funding, a coalition of some 150 organizations, strongly advocate the retention of the 6,526 new and competing grants in fiscal year 1985 and the maintenance of that grant level in fiscal year 1986 with an appropriation of $5.7 billion. We also join with the ad hoc group in recommending the retention of all 580 alcohol, drug abuse, and mental health new and competing grants in fiscal year 1985 and the provision of 650 new and competing grants in fiscal year 1986 with an appropriation of $499 million.

Mr. Chairman, the fiscal year 1985 NIH appropriation broke through the static budget structure of 5,000 new and competing grants that had previously prevailed for several years. The fiscal year 1985 appropriation, if used as Congress intended, will permit biological and biomedical research to move ahead at a pace more in line with the potential for progress in curing diseases that now exist. This can be done by maintaining the 6,500 grant level for fiscal year 1986.

I urge this subcommittee and this Congress to continue its farsighted investment in the health and productivity of the Nation by requiring the funding of all 6,526 NIH grants in fiscal year 1985 and by maintaining that level of support into fiscal year 1986.

Finally, I want to thank you for your courtesy, fortitude, and humanity in patiently hearing us give you answers that you already know. [Laughter.]

Senator WEICKER. I don't know them all. I use this as my education process also. I know you are well advised here. I see my good friend, Gar, who used to serve on the committee.

When I took over this job I tried to handle most of the hearings myself because I didn't know and still don't know all I should know. I think part of the problem we are confronted with is that science, and medicine are not so easily explained by a few media events put together by the President every now and then. It is a huge, ongoing effort. If it doesn't have the money, it isn't going to get done and people are going to die.

Mr. GRISHAM. I personally think people in the scientific community have found their voice about the issues created this year, and that will be one of the positive efforts that will come out of it. We will be more supportive of the efforts of you and your committee.

Senator WEICKER. I hope so. Certainly in the last several years every time I am confronted with a friend that has some tale to tell of a family member or friend that was dying, at least I can look them in the eye and know I am trying to do everything I can. I probably fail far short in that job. But there are an awful lot of tears shed in this country and then everybody goes back to business as usual.

Mr. GRISHAM. Thank you very much.

PREPARED STATEMENT

Senator WEICKER. Good to see you, Gar. Thank you both.

[The statement follows:]

STATEMENT OF JOE W. GRISHAM

Mr. Chairman, I am Joe W. Grisham, President of the Federation of American Societies for Experimental Biology (FASEB). I also am Professor and Chairman of the Department of Pathology at the University of North Carolina School of Medicine at Chapel Hill, and I am a working scientist. My research is supported by grants from the National Institutes of Health.

FASEB is a nonprofit organization whose purpose is to develop and disseminate new knowledge in the life sciences through its meetings and publications. The approximately 28,000 members of the Federated Societies represent all the important research, educational and clinical centers throughout the United States. Over the years FASEB has counted some 106 Nobel Prize winners among its membership.

First, I thank you and the other members of the subcommittee for this opportunity to testify on the President's fiscal 1986 budget request for the biological and biomedical research carried out by the National Institutes of Health. I want to commend the Chairman and his colleagues for their past and continuing support for research that means so much to the citizens of our nation and, indeed, to people throughout the world. I believe that this subcommittee can take credit for the many crucial and life-saving research advances that have been achieved over the years.

The support of basic research is most clearly and effectively articulated by support for individual investigator-initiated grants. These grants explore questions on the cutting edge of research and are the means to improve our ability to both treat and cure disease. In an attempt to show commitment to research as a high priority, the President's Special Analysis K of the FY 86 budget states: "The 1986 budget continues this Administration's emphasis on the importance of basic research across all scientific disciplines even in a time of budget restraint." Yet the Office of Management and Budget proposes to cut FY 85 NIH new and competing grants from the congressionally allowed level of 6,526 to 5,000 and to multi-year fund a portion of the 5,000 grants.

I believe that the Administration decision is bad policy. If it prevails, it will reduce the grant level below the FY 84 level, cutting research into cancer, heart disease, diabetes and other killing and crippling diseases. If it prevails, it will create more uncertainty for the biomedical research community which properly views the federal government as the major source of support for its important work. If it prevails, it will send yet another discouraging signal to the promising young researcher as well as to the established scientist about the uncertainties of a career in biological and biomedical research.

The Administration's unfortunate decision is compounded by its budget request for fiscal 1986. The fiscal 1986 request for NIH proposes a spending plan of $4.85 billion, a 5.8 percent reduction from the fiscal 1985 appropriation of $5.1 billion. Again, the Administration requests only 5,000 new and competing grants. The Administration refers to this lowered grant level as necessary to maintain "stability" of funding for biomedical research. In reality the proposed 5,000-grant level, locked in for several years, would simply reinstate an artificial support ceiling that would impede research progress in the basic life sciences. Clearly, Administration fiscal decisions are driving the NIH budget for both FY 1985 and FY 1986. While both as citizens and scientists, we sympathize with the effort to reduce the deficit, we believe that basic scientific research also is an important national priority and deserves more consideration than it is being given.

Mr. Chairman, we have been following your determined efforts to counter the OMB decision and commend you for your diligence and commitment. FASEB and the Ad Hoc Group for Medical Research Funding, a coalition of some 150 organizations, strongly advocate the retention of the 6,526 new and competing grants in FY 85 and the maintenance of that grant level in FY 86 with an appropriation of $5.7 billion. This recommendation of $5.7 billion is only $80 million above a current services level and would provide a few additional dollars for research centers, training and renovation of animal facilities. We also join with the Ad Hoc Group in recommending the retention of all 580 Alcohol, Drug Abuse and Mental Health new and competing grants in FY 85 and the provision of 650 new and competing grants in FY 86 with an appropriation of $499 million. This recommendation of $499 million is only $51 million over a current services level and would allow for enhancement of the intramural program, acquisition of essential equipment and initial planning for renovation and construction of clinical and laboratory facilities.

In light of the OMB decision on FY 85 NIH grants, we also recommend that you give consideration to specifying the number of new and competing grants in the language of the appropriations bill. It is regrettable that such a step has to be considered, but given this year's experience with OMB, it may be that the only sure way to gain Executive Branch compliance with congressional intent is to state the actual number of NIH new and competing grants in the law itself. This thought is further underscored by the March 18 GAO opinion on the OMB action which stated that although the proposal to multi-year fund a portion of NIH new and competing grants is "unlawful," the Executive Branch is "not legally bound to comply with the level of program activity set forth in congressional committee reports..." We also recommend, as a further underscoring of congressional intent, that you consider stipulating in the conference report on the FY 86 Labor-HHS appropriations bill the number of grants to be provided by the appropriation.

The proposed reduction in FY 85 grants and in the Administration's FY 86 request will hinder, if not reverse, the momentum of research at a time when the scientific community is poised to take advantage of significant opportunities in such areas as neurology, immunology and biotechnology.

The importance of maintaining this momentum cannot be overstated. The impact of disease can be measured in terms of human suffering—it devastates individual lives. We agree with a recent editorial in Science magazine which states, "There are few conditions of life that the average person would prefer to good health... Happiness is not defined as 'unhealthy, wealthy and wise'." The impact of disease also can be measured in economic terms—by undermining our health it also undermines our ability to be productive. Illness, whether a chronic nuisance or a terminal condition, keeps workers off the job and increases national health care costs astronomically. Our national health care bill is now running above $400 billion a year, a huge drain on our resources.

In the face of this, it is surprising to learn that the federal investment in biomedical research amounts to only about 1% of that awesome health care bill, while studies show that such research returns $13 in benefits for every $1 invested. Our health care system today depends on therapies that Dr. Lewis Thomas has called "nontechnologies" and "halfway technologies," meaning technologies that treat the symptoms, but not the disease, and are expensive to maintain. The few "high technologies" available intervene directly to thwart the disease, and most of them are cheap, simple and direct.

Surely it is obvious that the major hope for reducing the enormous cost of health care lies in basic research—research which already has paid dividends by cutting mortality and morbidity rates from many diseases. Surely we recognize the great promise of the new field of biotechnology and the importance of maintaining the country's competitive position against that of other nations which are investing heavily in gene transfer research. Surely we want to encourage our young, promising scientists to choose a career in one of these fields. Dr. Thomas has also said, "If I were a policy-maker, interested in saving money for health care over the long haul, I would regard it as an act of high prudence to give high priority to a lot more basic research in biologic science." I cannot say it any better.

Mr. Chairman, we believe that the FY 85 NIH appropriation broke through the static budget structure of 5,000 new and competing grants that had previously prevailed. The FY 85 appropriation, if used as Congress intended, will permit biological and biomedical research to move ahead at a pace more in line with the potential for progress that now exists. This can be done by maintaining the 6,500 grant level in FY 86.

I urge this subcommittee and this Congress to continue its farsighted investment in the health and productivity of the nation by requiring the funding of all 6,526 NIH grants in FY 85 and by maintaining that level of support into FY 86.

I would be happy to answer any questions you may have.

STATEMENT OF ROBERT ROSENZWEIG, PRESIDENT, ASSOCIATION OF AMERICAN UNIVERSITIES

Senator WEICKER. We have two very patient witnesses left. We have first Mr. Robert Rosenzweig, president of the Association of American Universities.

Mr. ROSENZWEIG. Thank you, Mr. Chairman. My patience wouldn't possibly match yours.

I think it is not overstating the case, Mr. Chairman, to say these last few months have been a little short of chaotic with respect to the budget of NIH. Even if you believe there was substantive merit in the administration's action, which I do not, and the way in which the action was taken, both in its magnitude and timing, it could hardly have been more disruptive. This whole episode, which I hope will be put right with your leadership, should be instructive. We ought now to recognize at least until the current shock wears off what ought really to concern us are the goals most seriously undermined by the administration's action; namely, sensible science policy and high quality biomedical research.

Those goals require a commitment to an effort that is large enough to continue support of demonstrably successful research programs, begin support of a significant part of most promising new research programs, and keep whole and healthy the institutions in which research takes place.

I want to call attention, if I may, to our concern for the growing capital deficits that characterize many of the leading research universities. Long years of strained finances caused in part by the withdrawal of Federal programs have left universities with inadequate or obsolete research facilities and seriously deficient research equipment and instrumentation. Continued inattention to the replenishment of capital facilities and instrumentation will in time render the debates over funding levels for research irrelevant because the structure which supports high quality research will have been irreplaceably eroded.

In that connection, I want to urge on the committee all the decisions about where funds for research facilities or for instruments and research itself should go must be based on the best judgments that competent professionals are capable of making among competing applications. If there is a better way to distribute scarce funds for science, neither we nor competitors in other nations have yet found it.

In dealing with NIH and the other important programs under the jurisdiction of this committee, I urge you to resist pressures to become involved in the decision making process about particular projects before the appropriate scientific judgments have been made. If the system that has helped build and maintain our scientific eminence is allowed to crumble, it is unlikely that it will be replaced by anything else that will serve us as well.

Finally, if I may, Mr. Chairman, I feel obliged to comment on the tape and some testimony given to you earlier. I would like the committee to be aware the tape that was given by Mr. Pacheco is property stolen from the University of Pennsylvania in a nighttime raid on a laboratory which was, to return to the language of the 1960's; trashed. If it has abeen money that had been stolen rather than the tape, the nature of the act would have been unmistakably clear. The act is no different because it was a tape rather than money that was taken.

The committee may wish to know also there is a Federal investigation in progress dealing both with the break-in and the allegations of mistreatment of animals in the laboratory.

Thank you very much.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony. We greatly appreciate it. Thank you.

[The statement follows:]

STATEMENT OF ROBERT ROSENZWEIG

Mr. Chairman and Members of the Subcommittee, my name is Robert Rosenzweig. I am President of the Association of American Universities and appear before you today on behalf of the Joint Committee on Health Policy, comprising my association, the American Council on Education, and the National Association of State Universities and Land-Grant Colleges. We appreciate the opportunity to testify on the Administration's proposed FY'86 budget for the National Institutes of Health and the Alcohol, Drug Abuse and Mental Health Administration.

All three Associations endorse the proposal of the Ad Hoc Group for Medical Research. This coalition represents the broad consensus of the biomedical research community and the voluntary health sector: an agreement that federal support for this research is essential to world health and to this nation's preeminence in health advances, research, disease prevention, and biotechnology.

The Committee, and in particular, the Chairman, has taken the lead in seeking resolution for FY'85 funding for NIH. We are deeply appreciative of these efforts. At a time when, in the past, we have concentrated on future opportunities for biomedical research, we are embroiled in a battle to maintain support for last year's appropriation.

The Administration's proposal for fiscal years 1985 and '86 would not only slow the progress of science, prevent 1500 new research starts, decrease the cadre of trained scientists committed to research, but it would, in addition, undermine the scientific community's belief that an appropriation bill, signed by the President, can be faithfully executed by agencies without interference. It is difficult, if not impossible, to explain the process--in which all of us in Washington are so deeply engaged, to those individual scientists who actually conduct research.

Many of these researchers are dismayed at the Administration's move to "impound" research funds. This lack of comprehension and loss of faith is damaging, not only to the Administration, but also to all of us who believe in a participatory democracy.

The Committee is well aware on scientists, researchers and research institutions of the effects of the Administration's refusal to spend last year's appropriation. It is not possible to overemphasize how discouraging and destabilizing the current state of NIH and ADAMHA funding practice is to the research community. Both the established investigator and the young, first-time researcher have effectively been "put on hold" since the President's budget was released early this year.

Unfortunately, while the Administration delays implementing last year's appropriation, important research goes undone, research teams are disbanded, and the extremely successful and decentralized system for conducting this nation's biomedical research is slowed. The majority of new research for FY'85 awaits resolution for the current fiscal year and prospects for the next.

As in the past few years, we support the proposals of the Ad Hoc Group for Medical Research for NIH and ADAMHA. This year's proposals attempt to recognize the necessary fiscal restraints in the budget. The proposals call for a current services budget with limited increases for specific programs of $75M for NIH and $51M for ADAMHA. The request would maintain the same number of new and competing grants of the FY'85 appropriation with full reimbursement of the direct and indirect costs of these grants.

As in previous years, the proposal of the Ad Hoc Group is based upon:

- Maintaining a priority score of 180 or at least 38% of approved research grants;
- A modest growth in research centers;
- A continuation of high priority clinical trials;

- A modest increase in support for research training to a level close to that recommended by the NAS

and,

- An increase in research facility construction funds to begin to address the crisis of obsolete and deteriorating research facilities.

We know you are acutely aware of the effects of the Administration's proposal for FY'85 on the biomedical research community. Universities do not have resources to substitute for the support the Administration is attempting to impound. For many years the research community has argued for stability in support, not just because it does not welcome unpleasant surprises, but also because shifts in levels of support cannot be accommodated without significant disruptions. If the NIH grant level shifts rapidly between grant years, the research is without support and research teams are disbanded. In addition, extreme fluctuations in the numbers of grants work hardships on institutional stability and ability to plan. As you know, federally sponsored research at U.S. colleges and universities is based upon both mandatory as well as substantial voluntary cost sharing. These institutions are not able to compensate for severe shifts in federal support.

As in previous years, we are forced by the Administration's budget to plead with the Committee for recognition of the federal obligation to reimburse institutions fairly--under the government's own guidelines--for the costs of research. We ask for no special treatment, but only the evenhanded approach favored by this Committee. The Administration's proposal to freeze indirect cost rates would affect institutions differently but not in relation to any measure of efficiency or fiscal responsibility. We hope the Committee will work with us in assessing the effects of this proposal on institutions' research capacity and to avoid any long term negative consequences of this proposal.

We recognize and share the concern over the costs of research and continue to work within our own community and with OSTP and the White House Science Council to seek more permanent resolution for accounting and reimbursing the costs of research. We believe these costs are becoming more commonly understood and that the increases we have seen are both supportable and, in fact, desirable. Analyses of indirect cost rates have shown recent increases to be due largely to the costs of facilities. Absent any new federal investment, such payments are not only appropriate, but essential.

On this point, we urge the Committee to continue its support for research facilities and instrumentation in NIH (and also in Title VII of HEA) and ask your assistance with your colleagues on the authorization committee to authorize new facilities programs. We believe continued inattention to the capital base of research institutions ultimately will cause the nation to fall behind other nations in research.

Because the federal investment in university based research facilities has all but disappeared in the past decade, many institutions have sought private funds and have borrowed to renovate and build new research facilities. The largest increases in most institutions' indirect cost rates are due to the allowable costs of interest recovery and depreciation of these facilities. While such sources of funding have allowed some relief from the problem of a decaying infrastructure, a majority of the nation's research universities have significant problems with their research facilities. Other institutions, desperate to provide reasonable facilities for the conduct of science and despairing of any competitive federal program to provide funds for research facilities, have sought to set aside research dollars for such purposes. We believe such targeting undermines the competitive process of peer review established for the allocation of federal research funds. This system has proved to be unparalleled in assuring the public that its tax dollars are spent on the best possible research opportunities as determined by research scientists. We urge the Committee to reject any such attempts to divert research dollars.

In closing I wish to emphasize several points:

- The proposals of the Ad Hoc Group for Medical Research for FY'85 and '86 are based upon the informed belief that at this level of support, the NIH and ADAMHA, could support excellent research that would improve health, reduce morbidity and mortality, and produce results that would advance biotechnology and associated industries.

- Support for research must not be partial; research grants should be kept whole;

- Support for research must be, at the very least stable, and continue to provide some level of new opportunity to encourage young investigators to enter and remain in research careers;

- Congress must reverse the long term neglect of the research infrastructure. State-of-the-art research cannot be conducted with obsolete equipment in decaying facilities;

and finally,

- Research support must continue to be awarded on a competitive basis.

Mr. Chairman, I thank you for this opportunity to testify before you. I am happy to answer any questions.

STATEMENT OF REV. T. BYRON COLLINS, S.J., SPECIAL ASSISTANT TO THE PRESIDENT FOR FEDERAL RELATIONS, GEORGETOWN UNIVERSITY

Senator WEICKER. Last we have Father T. Byron Collins, special assistant to the president for Federal Relations, Georgetown University. You are the clean-up hitter, Father. I am not so sure a little prayer isn't in order.

Reverend COLLINS. I will be short as a clean-up hitter ought to be. Thank you, Senator.

I am here on the National Library of Medicine, a project-specific program it has, and to support the request that is in the President's budget for bioethics. Georgetown for 10 years has competed for this. We ourselves have put $17 million into it. We have competed successfully because of the history Georgetown has in this particular field.

We are willing to take whatever guidelines and meet them.

I do thank you and echo Dr. Rosenzweig's comment that you are a very patient man.

PREPARED STATEMENT

Senator WEICKER. Thank you very much, Father. We greatly appreciate it.

[The statement follows:]

STATEMENTS OF REVEREND T. BYRON COLLINS

Mr. Chairman and Members of the Committee, I am Father T. Byron Collins, S.J., Special Assistant to the President of Georgetown University. We would like to thank the Committee for its support of the Bioethics Library and Information System in FY85 through the National Library of Medicine.

For FY85, the NLM requested $650,000 within its extramural program budget for Bioethics. We request that this level of support be continued in FY86 as requested by NLM so that the program of the bioethics library and information retrieval project can provide an up-to-date data base, bibliography and reference service to a national and international constituency interested in ethical, legal, and public policy questions surrounding such compelling contemporary issues as euthanasia, genetic intervention, surrogate parenthood, and human experimentation.

The National Library of Medicine (NLM) has provided continuous support since 1974 for a comprehensive cross-disciplinary information system at Georgetown University to monitor the widely scattered literature on bioethical issues and to make this literature available for use by health professionals, health policy makers, researchers, teachers and students, and others with an interest in the important and increasingly complex value dilemmas we confront in the areas of health care and biomedical research.

Through a combination of statistical data collected by NLM and the Bioethics Library, we know that the Georgetown University's BIOETHICSLINE and the Bioethics Library are utilized by a broad range of health care practitioners, faculty and students in universities, medical schools, and other professional schools, research institutes, government agencies, members of the clergy and of religious organizations, law firms, private corporations and members of the general public. The average number of patron visits to the Bioethics Library during the past three years has exceeded 2,700 per year. Based on data from January through March this year, the projected number of searches of BIOETHICSLINE in 1985 in the Bioethics Library alone will be 1,000. The NLM statistics indicate that more than 23,000 additional BIOETHICSLINE searches will be performed in other libraries and online centers throughout the world. Use of the Library and the database has increased steadily in each of the last several years, and is anticipated to continue at an even greater rate of increase in the future given the broad base of persons interested in bioethical issues.

We thank the Committee for its continued interest and request that our further written comments be submitted for the record.

On another issue, we would like to request that written testimony the Health Education Assistance Loan (HEAL) be entered in the record.

On behalf of our President, Timothy S. Healy, S.J., and our Chancellor, Matthew F. McNulty, Jr., Sc.D., we thank the Committee for this opportunity to testify.

I am T. Byron Collins, S.J., Special Assistant to President of Georgetown University and I am joined by Mary S. Albert from the Office of the Chancellor of Georgetown University Medical Center. We appreciate the opportunity of presenting written testimony on the Health Education Assistance Loan (HEAL) program and thank you for the past support of this program.

We come before you to request that the President's proposed limitation of $100 million of loan guarantees for the Health Education Assistance Loan (HEAL) program be deleted. We are also testifying before the health authorizing committees on the reauthorization of the program.

As you know, the HEAL program provides a Federal guarantee of loans provided by private banks to health professions students. There is no Federal cost to this program, and borrowers pay for defaults from a special insurance fund. This is expensive money (the interest rate is 90 Day Treasury Bill plus

3.5%) and students at our medical and dental schools take HEAL loans as a last resort. Nevertheless, our students (mostly from incomes of $30,000 or less) borrowed $4.3 million in HEAL loans last year. The proposed Administration limit would severely restrict the availability of financial aid, and prevent students from modest backgrounds from attending our schools.

We would like to thank the subcommittee for adding language in the report for FY 1985 which requested data on the repayment status of HEAL loans. We believe the report submitted by the Department of Health and Human Services is a first step in identifying the problems of administering this program. Some specific data in their report (eg. loans in default, for which HHS repaid the lender, although no data were submitted on the borrowers) reinforce our belief that delinquency and default should be monitored more closely. Administration of the program should be tightened: Schools should have strict requirements on debt counseling; lenders should have strict requirements on follow-up before they can submit delinquent loans for default payment; HHS should have tight collection procedures to assure that defaulters will resume repayment.

The wide publicity on HEAL default is not warranted. In fact, defaults, paid by the borrowers from a special fund, are presently at 5.3%, less than the default rate for mortgages (5.8%) in the last quarter of 1984.

It is imperative that the health professions schools not become elitist in the composition of their student body. Continuation of the HEAL loan program without the $100 million cap is essential.

On behalf of our President, Reverend Timothy S. Healy, S.J. and our Chancellor, Matthew F. McNulty, Jr., Sc.D., we thank you.

SUBCOMMITTEE RECESS

Senator WEICKER. The subcommittee will stand in recess until Wednesday, May 8, when we will meet again in this room at the hour of 10:30 to hear public witnesses on the National Institutes of Health, Alcohol, Drug Abuse, and Mental Health Administration, and the Health Care Financing Administration.

[Whereupon, at 1:50 p.m., Tuesday, May 7, the subcommittee was recessed, to reconvene at 10:30 a.m., Wednesday, May 8.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

WEDNESDAY, MAY 8, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:02 a.m., in room SD–116, Dirksen Senate Office Building, Hon. Quentin N. Burdick presiding.

Present: Senators Weicker, Specter, Proxmire, and Burdick.

NONDEPARTMENTAL WITNESSES

NATIONAL INSTITUTES OF HEALTH

STATEMENT OF MERRILL M. MITLER, M.D., EXECUTIVE SECRETARY-TREASURER, ASSOCIATION OF SLEEP DISORDER CENTERS

Senator BURDICK. Good morning. This morning we will be hearing from public witnesses on the National Institutes of Health, Alcohol, Drug Abuse, and Mental Health Administration, and the Health Care Financing Administration.

To my right, you will see three lights. Please begin your statement when you see the green light. You then have 3 minutes to summarize. When you see the yellow light, you have 1 minute left. This is necessary because of the great number of witnesses that we have this morning. I hope that you will try to watch the green and yellow lights. Please have your statement finished when you see the red light. If anyone has material that has not been presented, it will be made a part of the record.

Let's start with our first witness, Dr. Merrill M. Mitler, M.D., executive secretary-treasurer for the Association of Sleep Disorder Centers. You may proceed, Dr. Mitler.

Dr. MITLER. Mr. Chairman, I am Dr. Merrill Mitler, a clinical and research specialist in the physiology and diseases of sleep. I have worked in this area for the last 17 years. I am told that my testimony is the first by an elected representative of our organization, and that it is long overdue.

I represent the Association of Sleep Disorder Centers, which is made up of clinical specialists, working at medical schools and hospitals throughout the country. I also feel that I represent all humans when they sleep. I say this because in all of the governmental agencies, committees, and institutes, there was no one charged with the responsibility for health and welfare during the third of our lives that we call sleep.

Everyone sleeps. We must have sleep to survive. We must have good sleep to be alert throughout the day. If our sleep is abnormal, we may die, or at the very least our working functions will be impaired.

Over 100 million Americans do not have good sleep. They stop breathing when they fall asleep. They have insomnia, and they can't stay awake in the daytime. If any of you doze off while I am speaking, being a clinician, I will assume that it is a sign of abnormal sleep.

Sleep is not a quiet timeout for the body. Sleep is actively induced and exquisitely orchestrated. But when the brain goes to sleep, many diseases, particularly those of the respiratory and circulatory systems, are adversely affected.

Sleep pathology affects all ages. In infancy there is sudden infant death syndrome. In adolescence, there is failure in school and motor vehicle accidents from chronic sleep loss, alone and in combination with drugs and alcohol. In adulthood there is risk of sudden death during the night. In the elderly, there is deterioration of sleep in response to disorders such as arthritis, heart disease, and pulmonary disease.

We need governmental health to establish policy in areas where public safety is affected, and to support research on the fundamental role of sleep in health and disease. Here are examples of specific research questions:

Question one: Which patients are at risk for death or disability from heart attack, stroke, and seizure when they sleep?

Medical problems leading to death or disability arise during the night. These events seem to occur between midnight and 6 a.m. Heart and breathing problems during sleep are usually involved. People with the clinical signs of such cardiopulmonary problems during sleep are demanding treatment and physicians are treating them.

My colleagues in this country see about 500 new patients each week with these abnormalities. Medical cost of diagnosis and the initial treatment for these particular sleep disorders average about $5,000 per patient, or $130 million annually.

There is no Federally funded research on the long-term efficacy of any of the surgical and medical treatments now used.

Question two: Which sleeping pills are safe for patients with chronic insomnia?

Over $200 million is spent on sleeping pills each year. Most prescriptions are given to chronic users. But the long term safety of these drugs is unknown.

Questions three: Which patients should not drive motor vehicles, pilot airplanes, or operate dangerous equipment because they cannot stay awake?

General speaking, the obstacle to sleep research has been the lack of designated responsibility within HHS. Research in sleep disorders cuts across the field of pulmonary medicine, neurology, psychology, gerontology, and psychiatry. It does not fit neatly into the mission of any one HHS institution.

In fiscal year 1984, the amount of research money devoted to sleep research amounts to one-half of 1 percent of the amount the public spent on health care for sleep pathology. This is a very low ratio.

In this fiscal year, the proposed reduction from 6,500 to 5,000 new and competing grants represents a reduction of 23 percent. We applaud your committee's efforts to overturn this OMB directive. But the proposed cut has already reduced funding for sleep research by over 90 percent. Laboratories have been closed. There is now a climate of uncertainty among my colleagues, yet they are increasingly beleaguered with the difficult problems I have outlined for you.

We request that Federal policy recognize the health and safety issues related to sleep pathology, and that research funding reflect the financial and social impact that sleep pathology has on our society.

Thank you.

PREPARED STATEMENT

Senator BURDICK. Thank you very much. Your statement will be placed in the record in its entirety.

[The statement follows:]

STATEMENT OF DR. MERRILL M. MITLER

I am Dr. Merrill M. Mitler, a clinical and research specialist in the physiology and diseases of sleep. I represent The Association of Sleep Disorders Centers, a professional society of over 1000 clinical specialists working at some 100 diagnostic treatment facilities situated at medical schools and hospitals throughout the United States. My testimony today urges this committee to recognize some very old medical problems that technology now permits us to identify reliably and treat successfully.

Significantly disabling sleep pathology affects 10% of our population. Increased mortality and morbidity during the usual hours of sleep have been well-documented by numerous studies. The symptom of diminished alertness represents a significant threat to the safety of patients and the public. Research funds for our field are few and inconstant. Research projects in sleep disorders cut across the field of pulmonary medicine, neurology and psychiatry and do not fit neatly into the principal missions of the institutions within the NIH. Thus, money for sleep research is among the last available in times of increasing appropriations and the first lost in times of decreasing appropriations. This situation causes a climate of uncertainty in a clinical and research community that is increasingly beleaguered with difficult clinical problems. Here are a few of the most pressing problems.

WHICH PATIENTS ARE AT INCREASED RISK FOR DEATH OR DISABILITY FROM HEART ATTACK, STROKE AND SEIZURE WHEN THEY SLEEP AT NIGHT?

Studies of thousands of disease-related deaths show that the occurrence of death is not random with respect to time of day. The peak time for death is 8:00 AM. Almost 65% of disease-related deaths are recorded between 4:00 and 11:00 AM. Some data suggest that the physiological events leading to death (such as heart attack and stroke) occur several hours before the victims are actually pronounced dead. Deaths due to infection, respiratory disease and stroke seem to be particularly frequent during this time interval. A basic reason for this phenomenon is the daily waxing and waning of the body's ability to deal with any type of physiological crisis such as those that stem from micro-organisms or from chemical agents. All living things have such daily rises and falls in their defenses. The low point of the human's capability to deal with such physiological crises, provided the human goes to bed at about 11:00 PM, is about 4:00 to 6:00 AM. Little can be done about this inborn waxing and waning of our body's defenses other than to recognize and respect the phenomenon.

Factors such as age, type of disease, sex of the patient, and the physiological states of sleep also contribute to death during the night. Science now has techniques to unravel the influences of these factors. The results of these efforts may be to reduce the number of unexpected deaths during the night.

The necessary studies can be done. However, funding will require increased Federal support for interdisciplinary projects that involve expertise in Pulmonary Medicine, Pharmacology, Neurology, Psychiatry, Gerontology and Sleep Research. Such research projects do not easily fit into established patterns for the funding of extramural research, but such projects can be undertaken if proper Federal interest and support are made available.

Most key questions revolve around the interactions among (1) the physiological control of breathing and heart function during sleep (2) the aging process (3) the effects of various diseases and medical conditions on breathing and heart function, and (4) the effects of drugs.

CAN PEOPLE WITH KNOWN RESPIRATORY PATHOLOGY DURING SLEEP BE PROTECTED FROM LIFE-THREATENING EVENTS BY MEDICATION OR OTHER MEDICAL INTERVENTION?

In a person who is known to have sleep apnea, the number and duration of sleep apnea episodes can change from night to night. All the reasons for this variation are not known, but studies so far have implicated two key factors: (1) The degree of drug-related sedation (the greater the sedation, the worse the apnea) and (2) Sleeping position (apneas are longer and more frequent, particularly in overweight people, when they sleep on their backs).

Severe sleep apnea (when apneas are long in duration and occur frequently during sleep) can significantly reduce the amount of oxygen in the blood. Cardiac arrhythmias -- even cessations of heart beat -- are sometimes observed during sleep apneas. It is believed that severe sleep apnea increases the risk of sudden death during sleep. Some patients are completely disabled by the sleepiness and confusion which sleep apnea causes, and at times, treatment can dramatically reverse disability and even be lifesaving.

It has been shown that deaths from all causes rise markedly -- about 30% -- during the hours of sleep. The exact causes of this increased mortality are not known. However, many experts in sleep disorders now suspect that sleep apnea and other causes of cardiac arrhythmias during sleep are a major source of these increased deaths. Strokes are also more common during sleep, perhaps because of sleep apnea or perhaps because of abrupt changes in blood pressure and cardiac output that accompany certain phases of normal sleep.

WHICH SLEEPING PILLS ARE SAFE FOR PATIENTS WITH CHRONIC SLEEP DIFFICULTY?

There is widespread use of sleeping pills. Most users of sleeping pills take their medication only occasionally, as doctors recommend. However, the great bulk of prescriptions for sleeping pills are written for chronic users. It has been estimated that 75% of sleeping pill prescriptions go to people taking sleeping pills at least 120 days per year. Such chronic sleeping pill users are particularly common among the elderly. It has been estimated that 40% of sleeping pills go to persons over 60 years of age. As many as 35% of nursing home patients receive sleeping pills almost nightly (and a recent study suggests that as many as half of nursing home patients may have sleep apnea, which can be made worse by sleeping pills).

The overdose risk of sleeping pills is rather well-understood, but we know less about the mortality risks of chronic use of sleeping pills. One study showed that people who say they take sleeping pills "often" have 50% increased mortality. Further analyses of these data indicated that people who reported using sleeping pills "often" were significantly more likely to die at night.

Sleeping pills may contribute to unexpected deaths in the night. There are many possible scenarios that must be studied. For example, do sleeping pills dangerously increase the severity of sleep apnea in men with mild sleep apnea or with predispositions to sleep apnea such as obesity and snoring? It is surprising that there has never been a well-controlled study of long-term sleeping pill use or a controlled study sufficient to test the effect of sleeping pills on mortality. Thus, the long term safety of these common drugs must be regarded as unknown.

One of the recommendations by the National Academy of Sciences' Institute of Medicine and The Consensus Conference on Drugs and Insomnia (Washington, D.C., November 15-17, 1983) is that more research on sleeping pill safety should be done. This advice has not, unfortunately, lead to any substantial program by government agencies in studying sleeping pill safety. Since the recommendations from such prestigious sources have been ignored by NIH-PHS, study sections and grant administrators, congressional prodding may be needed.

WHY DO SO FEW ELDERLY SEEK TREATMENT FOR SLEEP PATHOLOGY IN SPITE OF HIGH INCIDENCE OF SLEEP PROBLEMS IN PEOPLE OVER 65?

Sleep problems increase steadily with age. However, recent surveys indicate that fewer than 15% of the patients presenting to Sleep Disorders Centers throughout the country are over 65. Complaints of insomnia, complaints of excessive sleepiness, and use of sleeping pills all are most common among Americans over 60. These complaints have a sound physical basis. Numerous brain wave recordings of the elderly have consistently shown that elderly people take longer to fall asleep and wake up much more frequently during the night, so that they must spend a longer time in bed to obtain the same amount of sleep which they needed at a younger age. There is no evidence that the elderly need less sleep. Therefore, they must spend a longer time in bed to obtain their daily sleep requirement.

It has recently been shown that the majority of elderly over 65 have at least one specific physiologic disorder during sleep. The most common is periodic movements during sleep or nocturnal myoclonus--leg jerks which are experienced at least 30 times a night by about 42% of randomly selected elderly subjects. Somewhat less common but of graver concern is sleep apnea, a condition where breathing stops repetitively for 10 seconds to 2 minutes during sleep. About 24% of elderly people have at least 30 apneas per night. Sleep apnea is found in 10 males for every 1 female between the ages of 20 to 50. In older age groups, males continue to predominate, but less so. Female elderly are many times more likely to have sleep apnea than premenopausal females. Furthermore, increasing apneas are associated with increasing sleep complaints, increasing depressive symptoms, increasing nocturnal confusion, and increasing daytime sleepiness.

The great advances in recent years in understanding the physiologic disorders related to sleep disturbances in the elderly unfortunately have not been accompanied by government-supported controlled trials to determine which treatments of sleep disorders are safest and most effective. It is evident that at the current time, most physicians simply give out sleeping pills when the elderly patient complains of trouble with sleep. This is not a matter of neglect on the part of physicians because, as has been mentioned, there really has not yet been any determination of what treatments would be safer or better.

Part of the problem with developing practical solutions to sleep problems in the elderly has been the institutional lack of responsibility. Although most sleep problems are treated by general practitioners, the Institute of General Medical Sciences has not been active in this area, perhaps following the reasoning that the problem would be better handled by NIMH. NIMH, however, has not recognized sleep disorders as a priority area, particularly when treatment research (as contrasted with basic research) is proposed for funding. The NIMH has tended to pass the buck for sleeping pill research to NIDA and to the manufacturers of the drugs. The NIDA, however, interests itself in drug abuse, and thus, no institute is really taking responsibility for examining sleeping pill safety and efficacy and the alternative treatments. The manufacturers of sleeping pills focus their studies on otherwise healthy people with insomnia. Manufacturers specifically avoid studying the effects of their sedatives on people with chronic illness -- such studies are not required by the FDA and therefore are not cost effective to the manufacturer. However, people with known and unknown chronic illness do take sleeping pills in America. Questions about the effect of this practice on morbidity and mortality of diseases are now being posed.

WHICH PATIENTS SHOULD LOSE THEIR DRIVING PRIVILEGES BECAUSE THEY CANNOT STAY AWAKE?

The problems of diminished alertness is symptomatic of the disorders excessive somnolence such as sleep apnea and narcolepsy. Too often these conditions are first diagnosed after a serious vehicular or industrial accident. We need government help to notify the public that falling asleep involuntarily while sitting quietly reading or watching television is a serious symptom that could lead to accidents. The likelihood of such symptoms is greatest in people who snore and who are overweight. We need research funds to devise acceptable ways for measuring treatment efficacy in improving alertness in patients with disorders of excessive somnolence.

STATEMENT OF JAY H. STEIN, M.D., CHAIRMAN, DEPARTMENT OF MEDICINE, UNIVERSITY OF TEXAS, SAN ANTONIO ASSOCIATION OF PROFESSOR OF MEDICINE

Senator BURDICK. Our next witness will be Jay Stein, M.D., chairman of the department of medicine, University of Texas, San Antonio Association of Professors of Medicine.

Dr. STEIN. Thank you, Senator.

Good morning. I am Dr. Jay Stein, chairman of the department of medicine at the University of Texas Health Science Center in San Antonio. I am here today in my capacity as president of the Association of Professors of Medicine [APM], the organization that represents the chairpersons of departments of medicine in the Nation's medical schools.

I appreciate the opportunity to share the association's views regarding the fiscal year 1986 funding for the National Institutes of Health. On behalf of the 10,000 full-time faculty departments of medicine, the association wishes to express appreciation to the members of this subcommittee for their efforts to assure adequate Federal funding for our national biomedical research endeavors. Your leadership in this area has sent a positive message to the research community and to those contemplating careers in bioscientific investigations.

Before addressing the administration's requested budget for fiscal year 1986, I will comment briefly on the proposal of the Office of Management and Budget to alter NIH funding policies with regard to extramural awards.

I would like to look beyond the issue of how many grants could be funded this year and focus instead on the potential long-term impact of the OMB proposal.

If, after the President has signed it into law, the NIH budget is subject to adjustment by the administration, without congressional approval, then Federal funding for research becomes a totally uncertain situation, and the advisability of investing time and effort in the competition for funds becomes impossible to assess.

Last fall, encouraged by the budget provided by the Congress, we, as chairmen, urged our faculty and departments to compete for support from a generously funded NIH extramural program. Clearly, the research community as a whole was optimistic about funding opportunities as demonstrated by the increase in applications for research project grants, 18,600 estimated for fiscal year 1985, compared to approximately 16,800 in fiscal years 1983 and 1984.

Suddenly in January, we became aware that our optimism may have been unfounded. As this uncertainty has continued, we have watched as talented scientists have grown increasingly disheartened. We can tell you from first-hand experience that the research community is becoming demoralized.

In short, regardless of whether it is implemented, the OMB directive has had a major adverse impact on the research community and the extent of the damage is broadened as each day passes with the issue unresolved.

Again, the only signs of encouragement for scientists have been congressional iniatives to prevent the implementation of the forward funding policy.

For the remainder of my time, I would like to discuss the President's proposed budget for fiscal year 1986.

Certainly, all of us recognize that the Federal deficit must be reduced, if we are to enjoy economic stability. Consequently, I will not presume to suggest that Federal spending for research and development should be increased. Rather the association appeals to the members of the subcommittee to assure that health research receives an appropriate share of overall R&D expenditures.

It is clear that the administration believes that Government can afford to strengthen its research program. Under the President's budget, total Federal R&D spending would be increased by approximately 13 percent, with the research programs for the Department of Defense receiving the largest increase, 22 percent. However, health research would not enjoy similar growth. In fact, the NIH budget would be reduced by 6 percent.

This imbalance is more striking when one examines the actual figures involved. The President has requested $39.4 billion budget for military research and development, more than eight times the $4.85 billion budget proposed for the NIH. Is the importance or promise of weapons research really eight times greater than the potential benefits of today's biomedical research efforts. We think not, not at this point of development of medical knowledge when basic biologic discoveries are leading us to understand literally hundreds of the diseases and disorders that afflict mankind.

As an alternative to the administration's request, the association has endorsed the proposal of the ad hoc group for medical research funding. Specifically, we concur that the fiscal year 1986 budget for NIH should be increased by at least $555 million over the current year's budget. We believe that this is a responsible proposal which recognizes the funding requirements of a productive bioscience effort within the context of the need to control Government spending.

I am sure that you have already seen the attached document outlining the ad hoc group's recommendations. Rather than reiterating these details, may I simply commend the document to your attention.

In closing, may I again express the association's appreciation to the members of this subcommittee for your tireless efforts on behalf of medical research and the health of the American people.

Thank you.

PREPARED STATEMENT

Senator BURDICK. Thank you very much. We will insert your statement in the record at this point.

[The statement follows:]

STATEMENT OF DR. JAY H. STEIN

Good morning. I am Dr. Jay Stein, chairman of the department of medicine at the University of Texas Health Science Center at San Antonio. I am here today in my capacity as president of the Association of Professors of Medicine (APM), the organization that represents the chairpersons of departments of medicine in the nation's medical schools. I appreciate this opportunity to share the Association's views regarding FY 1986 funding for the National Institutes of Health (NIH). Funding for the NIH is of great importance to the members of APM because we are physician scientists and because a substantial portion of the extramural research sponsored by the NIH is conducted in the departments we chair.

On behalf of the 10,000 full-time faculty in departments of medicine, the Association wishes to express appreciation to the members of this subcommittee for their efforts to assure adequate Federal funding for our national biomedical research endeavor. Your leadership in this area has sent a positive message to the research community and to those contemplating careers in bioscientific investigation: that the Congress is committed to maintaining the momentum and quality of today's exciting and progressive research effort. We are just beginning to capitalize on some of the knowledge uncovered in the past several decades and can anticipate continued progress in our ability to treat and prevent disease. It is gratifying to the research community that the Congress has recognized the enormous potential of this "era of biology" and has stood firm in its efforts to provide funding levels that will enable us to pursue many of the promising bioscientific leads that are being identified on an almost daily basis. In addition, it is important to note that your strong support for the research agencies of the Public Health Service is in accord with the views of the overwhelming majority of Americans who have indicated, through opinion surveys, that they favor increased funding for basic research and for medical science in particular.

In recent years, representatives of the Association who have appeared before this subcommittee have focussed their remarks on the specific funding requirements for a productive federal research program. However, this year, I would like to discuss the biomedical research effort in the context of how it is being affected by the political and economic forces that are changing government spending priorities. Before addressing the Administration's requested budget for FY 1986, I will comment briefly on the proposal of the Office of Management and Budget to alter NIH funding policies with regard to extramural awards. We greatly appreciate your efforts to rectify this matter and hope that the final outcome will be based on the GAO opinion requested by Chairman Weicker. Regardless of how the issue is resolved, a great deal of irreparable damage has already been done. I know that you are aware that the proposed reduction in the number of FY 1985 grants from 6,500 to 5,000 has caused consteration--one might say panic--within the research community. I would like to look beyond the issue of how many grants can be funded this year and focus instead on the potential long-term impact of the OMB proposal.

The notion that the Administration believes it can simply ignore Congressional instruction with regard to Federal appropriations is frightening to the community of scientists that depends primarily on the Federal government for the support of basic research. If, after the President has signed it into law, the NIH budget is subject to adjustment by the Administration without Congressional approval, then Federal funding for research becomes a totally uncertain situation and the advisability of investing time and effort in the competition for funds becomes impossible to assess. Last fall, encouraged by the budget provided by the Congress, we as chairmen urged faculty in our departments to compete for support from a generously-funded NIH extramural program. Clearly, the research community as a whole was optimistic about funding opportunities, as demonstrated by the increase in applications for research project grants (18,600 estimated for FY 1985, compared with approximately 16,800 in fiscal years 1983 and 1984). Suddenly in January, we became aware that our optimism may have been unfounded. As this uncertainty has continued, we have watched as talented scientists have grown increasingly disheartened. We can tell you from first-hand experience that the research community is becoming demoralized: it appears that the number of NIH grants may be decreased by almost 25%; the competition for funding seems to have been reduced to a structureless game; and individual scientists, believing that their success or failure could be determined by an arbitrary change in NIH funding policies, are reconsidering their decisions to engage in research careers.

In short, regardless of whether it is implemented, the OMB directive has had a major adverse impact on the research community and the extent of the damage is broadened as each day passes with the issue unresolved. Again, the only signs of encouragement for scientists have been Congressional initiatives to prevent the implementation of the "forward-funding" policy. It is impossible to overstate our appreciation for the actions taken by the distinguished chairman of this subcommittee and other Congressional leaders who are determined to assure that health research is funded adequately and fairly.

For the remainder of my time, I would like to discuss the President's proposed budget for FY 1986. Certainly, all of us recognize that the Federal deficit must be reduced if we are to enjoy economic stability. Consequently, I will not presume to suggest that Federal spending for research and development should be increased. Rather, the Association appeals to the members of this Subcommittee to assure that health research receives an appropriate share of overall R&D expenditures. It is clear that the Administration believes the government can afford to strengthen its research programs. Under the President's budget, total federal R&D spending would be increased by approximately 13%, with the research programs of the Department of Defense receiving the largest increase (22%). However, health research would not enjoy similar growth. In fact, the NIH budget would be reduced by approximately 6%. This imbalance is more striking when one examines the actual figures involved. The President has requested a $39.4 billion budget for military research and development--more than eight times the $4.852 billion budget proposed for the NIH. Is the importance or promise of weapons research really eight times greater than the potential benefits of today's biomedical research effort? We think not. Not at this point in the development of medical knowledge when basic biological discoveries are leading us to understand literally hundreds of the diseases and disorders that afflict mankind. Not at a time when it is estimated that:

- 11 million people are diagnosed as diabetics with annual treatment costs of approximately $10 billion,
- 2 million Americans are suffering from Alzheimer's disease at an annual cost of $25 billion.

- 100 million Americans are being treated for digestive disorders at a cost of about $50 billion annually, and
- 3.5 million Americans are debilitated by stroke and injuries to the central nervous system and annual treatment costs for neurological and communicative disorders are approximately $114 billion.

Consider the savings that can be achieved in economic as well as human terms if we can conquer these and other debilitating disorders. In light of such statistics and the enormous promise of today's health research effort, we fail to see how the Administration can conclude that the government should reduce its investment in medical science.

As an alternative to the Administration's request for the NIH, the Association, along with over 125 other organizations, has endorsed the proposal of the ad hoc Group for Medical Research Funding. Specifically, we concur that the FY 1986 budget for NIH should be increased by at least $555 million over the current year's budget. This recommendation is based on careful calculations of the funds required to provide stable support for most NIH programs and allow modest growth for several activities including research centers, research training and career development awards, and facility construction. We believe that this is a responsible proposal which recognizes the funding requirements of a productive bioscience effort within the context of the need to control government spending. I am sure that you have already seen the attached document outlining the ad hoc group's recommendation. In addition, the booklet contains some fascinating information about the research accomplishments of recent years, the savings achieved as a result of advances in medical science, and the areas of medical research in which major breakthroughs appear to be imminent. Rather than reiterating these details, may I simply commend the document to your attention.

In closing, may I again express the Association's appreciation to the members of this subcommittee for your tireless efforts on behalf of medical research and the health of the American people. I would be happy to answer any questions.

STATEMENT OF FRITZ E. DREIFUSS, MB, FRCP, CONSORTIUM FOR CITIZENS WITH DEVELOPMENTAL DISABILITIES/HEALTH RESEARCH AND PREVENTION TASK FORCE

Senator BURDICK. The next witness will be Fritz E. Dreifuss, Consortium for Citizens with Developmental Disabilities/Health Research and Prevention Task Force.

Dr. DREIFUSS. I am Fritz Dreifuss, professor of neurology at the University of Virginia. I am chairman of the board of the Epilepsy Foundation. I have the honor today to represent member organizations of the Health Research and Prevention Task Force of the Consortium for Citizens with Developmental Disabilities.

I want to express appreciation, sir, for this opportunity to present our views on biomedical research funding. Not only are we interested in biomedical research funding, we actually conduct a lot of funding for research ourselves and various member institutions, for example, United Cerebral Palsy has seed grants, and the Epilepsy Foundation of America provides seed grants for research and training. We feel that we are very much dependent on moneys appropriated for biomedical research.

During the past 6 months, we have seen a very disturbing shift in the philosophy toward appropriations for the National Institutes of Health. In mid-January, the Office of Management and Budget ordered NIH to fund only 5,000 grants and 500 research centers out of 6,256 grants and 533 research centers, which had previously been appropriated.

This action, which the Government Accounting Office has determined to be illegal, has had a devastating effect not only upon new research initiatives, but upon already ongoing research programs.

For example, the Comprehensive Epilepsy Program at the UCLA School of Medicine found its program project application unfunded, even though its biology school was a highly competitive 142. This center has established itself in the forefront of the effort to understand genetic mechanisms of epilepsy, special problems of epilepsy in ethnic and racial minorities, and in the basic mechanisms of epilepsy at the molecular level.

MOD cites the need to achieve budget savings as justification for this disregard of congressional intent. Not only is it a shortsighted policy, but it demonstrates the total misconception of the economic, not only to mention the human benefits which are derived from medical research.

Medical research funding is an investment which yields substantial long-term savings. It has been estimated, for example, that for every $1 spent on medical research, medical costs alone are reduced by $15. Additional savings are realized through reduced expenditures for the various programs which disabled individuals depend upon for essential services.

Real budgetary savings cannot be achieved by shortchanging medical research. The savings will occur only through prevention, and when effective treatments help people with otism, cerebral palsy, epilepsy, mental retardation, and other disabilities to become as self-sufficient as possible.

The efforts of this subcommittee to restore the number of grants to the congressionally enacted level is deeply appreciated. We hope that this issue will be satisfactorily resolved.

The opportunities for major progress in neurological research are overwhelming for otism, epilepsy, cerebral palsy, and a host of other neurological disorders. Unfortunately, the reduction of funding for medical research affects predominantly clinical research, which is not as easily funded as basic research, and from clinical research and clinical training research come the young people of the future upon whom the future in research depends. We would, therefore, very much appreciate that the numbers which we have quoted in our submission will be acceded to by the Congress.

We thank you very much, sir. I also want to add my personal thanks, Senator Burdick, for your stand on these issues.

PREPARED STATEMENT

Senator BURDICK. Thank you. Your statement will be placed in the record.

[The statement follows:]

STATEMENT OF DR. FRITZ E. DREIFUSS

Introduction: Fritz E. Dreifuss, M.B., F.R.C.P. is the Director of the Comprehensive Epilepsy Program and Professor of Neurology at the University of Virginia's School of Medicine in Charlottesville. Dr. Dreifuss is Chairman of the Board of the Epilepsy Foundation of America. This testimony is presented on behalf of the Health Research and Prevention Task Force of the Consortium for Citizens with Developmental Disabilities (CCDD).

The Consortium for Citizens with Developmental Disabilities (CCDD) is a working coalition comprised of consumer, provider and professional organizations which advocate on behalf of people who are developmentally disabled. The CCDD has been in existence since 1973, advocating for this population in a variety of areas, including the appropriation of adequate federal funding for basic and clinical biomedical research.

CCDD HEALTH RESEARCH AND PREVENTION TASK FORCE

American Association on Mental Deficiency
American Association of University Affiliated Programs
American Speech-Language-Hearing Association
Association for Retarded Citizens
Epilepsy Foundation of America
National Alliance for the Mentally Ill
National Association of Protection and Advocacy Systems
National Easter Seal Society
National Network to Prevent Birth Defects
National Recreation & Parks Association
National Society for Children and Adults with Autism
United Cerebral Palsy Associations, Inc.

Mr. Chairman: On behalf of the member organizations of the Health Research and Prevention Task Force of the Consortium for Citizens with Developmental Disabilities, I want to express appreciation for this opportunity to present our views on Biomedical Research Funding. Developmental Disabilities are chronic disabilities which are attributed to mental and/or physical impairments which are apparent before the age of twenty-two. Developmental disabilities tend to be life-long and result in substantial limitations of major life activities such as self-care, mobility, self-direction, the capacity for independent living and economic self-sufficiency.

Among the institutes of the National Institutes of Health (NIH), the research funded by the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) and the National Institutes of Child Health and Human Development (NICHD) is most directly concerned with seeking an understanding of the causes and treatment of developmental disabilities, which include autism, cerebral palsy, epilepsy and mental retardation. The research initiatives of the National Institutes of Allergy and Infectious Diseases (NIAID) and the National Institute of Mental Health (NIMH) are also of great importance.

Before commenting on any of the institutes in particular, however, I wish to make a comment about the need for appropriate funding for all medical research. Basic and clinical research, regardless of its funding source or its primary application, contributes to the fundamental well of knowledge from which answers to all medical problems are drawn. I speak here today not just in behalf of the the NINCDS and other institutes which directly impact disabled people. I speak in support of all medical research.

Recognizing that treatment problems persist and that the basic puzzle of what causes the underlying disorders of many developmental disabilities are still far from solved, many voluntary health organizations continue their commitment to support research and, in particular, to the funding of "seed grant" research to test new concepts; explore new avenues of scientific inquiry; and assist young researchers to gain the experience necessary to successfully compete for NIH research funding. For instance, the Research and Education Foundation of the United Cerebral Palsy Associations spent approximately $1.5 million in 1984 on prevention and treatment of cerebral palsy. Such research included grants which: investigated various aspects of the treatment of jaundice in the newborn; projects which researched the causes and prevention of respiratory distress in the newborn; investigations into a variety of infections of the central nervous system; and research into a variety of treatments designed to reduce the affects of this disabling condition. UCP also supports research in rehabilitation and bioengineering which will enable persons with cerebral palsy to live independently within their community. Similarly, the Epilepsy Foundation of America funded $540,000 in research during 1984. Without the continued growth of NIH research into the prevention and amelioration of developmental disabilities, however, much of our own research will be hindered.

During the past six months, we have seen a disturbing shift in the philosophy towards appropriations for the National Institutes of Health. Last year, Congress determined that NIH should award between 6,200 and 6,800 new research grants and support 533 clinical research centers. It should be noted that this funding level was made possible largely through the leadership of this Subcommittee. Shortly after the FY 1985

Appropriations bill was signed into law, NIH announced its intention to fund 6,526 research grants. In mid-January, however, the Office of Management and Budget (OMB) ordered NIH to fund only 5,000 grants and 500 research centers. This action, which the Government Accounting Office has determined to be illegal, has had a devastating affect not only upon new research initiatives but upon many ongoing research projects. For instance, NICHD expects to be able to award only 27 percent of all approved grants this year compared to its original 35 percent target. At the January meeting of the NICHD Council, 44 fewer grants than expected were awarded including 5 within the Mental Retardation and Developmental Disabilities Branch.

NINCDS projects a similar drop in its award rate - from 34 percent to 28 percent. The Institute's payline for the year was originally expected to be 150. In January, the NINCDS Council was only able to fund grants with a priority score below 141. As a result, the Comprehensive Epilepsy Program at the UCLA School of Medicine found its program project application unfunded even though its priority score was a highly competitive 142. This Center has established itself in the forefront of the effort to understand the genetic mechanisms of epilepsy, the special problems of epilepsy in ethnic and racial minorities and in the basic mechanisms of epilepsy at the molecular level. Yet it faces the loss of federal support on July 1.

OMB cites the need to achieve budget savings as justification for this blatant disregard of Congressional intent. Not only is this short-sighted policy but it demonstrates a total misconception of the economic, not to mention human, benefits which are derived from medical research.

Medical research funding is an investment which yields substantial long-term savings. It has been estimated that for every $1.00 expended on medical research, medical costs, alone, are reduced by $13.00. Additional savings are realized through reduced expenditures for the various programs which disabled individuals depend upon for essential services. Other savings derived from medical research are more difficult to document. These are the savings achieved through reduced human suffering.

There are approximately 2 million Americans who have been identified as being moderately to profoundly mentally retarded. Another 3 to 4 million individuals will be identified as mentally retarded at some point in their lives. Over 2 million people have epilepsy; 750,000 individuals have cerebral palsy and 450,000 have been identified as having autism. These and the various other neurological and communicative disorders cost our society approximately $114 billion each year. Real budgetary savings can not be achieved by short-changing medical research. The savings will occur only through prevention and when effective treatments help people with autism, cerebral palsy, epilepsy, mental retardation and other disabilities to become as self-sufficient as possible.

Your efforts, Mr. Chairman, along with those of this Subcommittee, to restore the number of grants to the Congressionally-enacted level is deeply appreciated. We hope this issue will be satisfactorily resolved in the very near future.

In March, this Subcommittee heard testimony from Administrative witnesses regarding the research opportunities and funding needs of the various institutes within NIH. The Administration witnesses told the Subcommittee what can be done with the limited resources which the Office of Management and Budget would like to see allocated to medical research. I am here to convey the recommended FY 1986 funding levels developed by the Health Research and Prevention Task Force of the Consortium for Citizens with Developmental Disabilities. Our recommendations reflect the funding needed to maintain the existing levels of research and to provide for modest program growth.

The opportunities for major progress in neurological research are overwhelming for autism, epilepsy, cerebral palsy and a host of other neurological disorders. The 1983 Report on the Research Opportunities in the Neurological Sciences, which was prepared at the request of this Subcommittee, concluded that, "Today we stand on the threshold gazing at a neuroscience horizon that has suddenly widened and deepened many times over. Our position is similar to that of the 17the century scientists who gazed for the first time into the newly invented microscopes and telescopes that revealed to them the expanded horizons of the microworld of nature within and the macroworld of the solar planetary world without... There is every indication that research and research training in the neurological and communicative sciences, if adequately supported by the Congress of the United States, will sustain and even accelerate the already exponential increase in our understanding and ability to alleviate — and indeed cure -- neurological disease."

These advances which apply to all of neurosciences are being applied to specific conditions by several special sections of the National Institute of Neurological and Communicative Disorders and Stroke. In 1982, a new Section on Autism and Behavioral Disorders was created. This section is funding vital research on the diagnosis of autism. Autism is often misdiagnosed, and there are several different types of autism. The new studies are exploring the far ranges of autism and producing common terminology or standardized professional language for research and for the various forms of autism.

The Epilepsy Branch within NINCDS has managed an innovative Antiepileptic Drug Development (ADD) program during the past 10 years which has developed 6 of the 16 anticonvulsant drugs which are currently available. More than 200,000 Americans, however, continue to have more than one-seizure-a-month. Application of the emerging neurological techniques is providing dramatic new information about epilepsy which will lead to further new drug therapies for the hundreds of thousands of people for whom known medications are not effective.

While the Institute's total budget has steadily increased to meet the expanding opportunities in neurological research, the share allocated to epilepsy research has steadily declined since 1978. This is due, in part, to the growing difficulty experienced by researchers in securing NIH funding for clinical research. This problem not only contributes to the problem of recruiting and training researchers, but in disseminating the latest research findings to practioners.

Tragically, the surge in neurological research which has been occurring, cannot be sustained under the Administration's proposed budget request of $374 million for NINCDS - a reduction of 5.5 percent from the level appropriated by Congress for the current fiscal year. This funding level would enable NINCDS to fund only 26 percent of approved grants. Young scientists will be lost from basic and clinical research because there will be fewer training and research opportunities. We must have strong and growing training programs; we must have a long-term commitment to multidisciplinary clinical research centers for major neurological conditions; the number of basic research grants must increase; and they must be fully funded.

The Health Research and Prevention Task Force recommends an appropriation of $444.5 million -- an increase of $47.6 million or 11.9 percent over the Fiscal Year 1985 Appropriation.

The National Institute of Child Health and Human Development (NICHD) supports and conducts research on all phases of human development from conception through pregnancy and infancy to early adulthood. Problems associated with pregnancy and fetal, infant and child development are among the major causes of developmental disabilities.

In 1984, the NICHD began an important new initiative in the prevention of low birth weight. This is a major problem facing the nation today in maternal and child health. Two-thirds of all infant deaths occur among Low Birth Weight infants - most of these fall within the classification as Very Low Birth Weight infants or those who weigh less than 3-1/2 pounds at birth. Infants in intensive care experience a high incidence of illness and complications as newborns and Very Low Birth Weight infants in particular, have a markedly elevated incidence of developmental disabilities.

This initiative is funded through the Center for Research for Mothers and Children which contains the Mental Retardation and Developmental Disabilities Branch. This Branch supports research covering the spectrum of human development as it affects mental retardation, including genetic, biological and behavorial processes. The Branch also provides core support for the 12 national Mental Retardation Research Centers.

The Health Research and Prevention Task Force recommends an appropriation of $347 million for NICHD research - an increase of $34 million or 11 percent. This appropriation would allow the Institute to fulfill its commitments and allow for a modest growth in its activities.

The National Institute of Allergy and Infectious Diseases conducts and supports research contributing to a better understanding of the causes of allergic, immunologic and infectious diseases and to the development of better means of preventing, diagnosing and treating these conditions. A number of projects are supported by the NIAID which are concerned primarily with diagnosis, prevention and treatment of infectious diseases of importance to the fetus, neonate and child. The range of developmental disabilities which may result from these infections is broad and includes cerebral palsy, blindness, deafness, mental retardation and epilepsy.

The Administration's FY 1986 budget request of $353 million represents a 5 percent reduction from FY 1985 Appropriation. We recommend that the National Institute of Allergy and Infectious Diseases receive $415 million during FY 1986 - an increase of 12 percent.

The National Institute of Mental Health, much like NINCDS, is on the brink of major advances. Therefore, we are recommending an appropriation that would support an acceleration of research. New and compelling evidence that mental illness has a biological base indicates that opportunities are at hand to discover more effective treatments and cures. Dr. Daniel Freedman, past president of the American Psychiatric Association, has stated that the recognition of the biological base for serious mental illness "is one of the greatest achievements in the mental health field in the past quarter century."

The FY 1986 Administration request for research amounts to a 3.1 percent reduction. Given the extremely high promise in the field of mental health research, especially in neuroscience, this is extremely poor public policy. Further progress in identifying how the brain works, and into the causes of major mental illness would be seriously hampered by such a low funding level for this program. The effects of this will be a serious shortage of mental health researchers in years to come. The Health Research and Prevention Task Force recommends an appropriation of $253 million for research and $24 million for research training through the NIMH.

Mr. Chairman, this concludes the testimony and appropriations recommendations of the Health Research and Prevention Task Force of the Consortium For Citizens With Developmental Disabilities. We thank you for this opportunity to express our views, and we will be happy to respond to any questions which you may have.

STATEMENT OF CYNTHIA H. NULL, PH.D., EXECUTIVE DIRECTOR FEDERATION OF BEHAVIORAL, PSYCHOLOGICAL AND COGNITIVE SCIENCES

Senator BURDICK. You are all watching the lights well, that is the only way that we will get all of you heard. Bear in mind that all of your testimony will be in the record. You will notice that there are members who are not here this morning, and the way they get the information is by reading your testimony. If you can't put your entire testimony in, it doesn't mean that it won't be read.

The next witness will be Cynthia Null, Ph.D., executive director of the Federation of Behavioral, Psychological and Cognitive Sciences. Welcome to this committee.

Dr. NULL. Good morning. I am Dr. Cynthia Null, and today I am testifying on behalf of the Federation of Behavioral, Psychological and Cognitive Sciences and the American Psychological Association.

Behavior is a key factor in successful health promotion and in disease prevention. Therefore, behavioral science research is critical to improving the health of our Nation's people.

Thank you for the opportunity to comment on the fiscal year 1986 appropriation for the National Institutes of Health. Let me begin by applauding efforts to restore the number of new or competing research awards at NIH to 6,500 for fiscal year 1985. We deplore the action of the administration to reduce the number of awards in fiscal year 1985 in clear violation of congressional intent.

Because of your tight schedule, I will briefly comment on the health and behavior initiative, and the representation of behavioral scientists on the NIH Advisory Council. Our written testimony focuses on NICHD and NIA, although behavioral science research is relevant to and funded throughout NIH.

We wish to commend the leadership of this subcommittee in the important and promising research on health and behavior. Behavior has been linked to many health problems, including cancer and heart disease. Health impairing behavior, such as smoking, poor diet, lack of exercise, and failure to comply with treatment, are all linked with serious disease. Stress has also been linked to serious illness as well.

As you know, a special health and behavior initiative was developed between PHS agencies, and was supported in the report accompanying the fiscal year 1985 appropriations bill. But the $7 million to fund this initiative was eliminated. An important priority for research is the integration of behavioral and biomedical knowledge so that the mechanisms underlying the interrelationship between behavior and physiological processes will be more clearly understood.

We remain concerned about the adequacy of representation of behavioral and social scientists on NIH advisory councils. Despite NIH's support for this science, very few behavioral and social scientists serve on NIH advisory councils. We strongly believe that their participation on advisory boards at NIH is crucial.

The administration's fiscal year 1986 budget calls for a $287 million reduction in NIH. Although we are sympathetic with deficit reduction efforts, we believe that the health of the people of this Nation is too important to have research at NIH so drastically cut.

We are, of course, concerned that NIH funds that go to support behavioral and social sciences research should not be cut but increased.

We share with you a strong concern for consistency of funding for health research from the Federal Government. It is important for the training of future generations of scientists, for the treatment and prevention of illness, the birth of healthy and wanted babies, increased functioning of the elderly, and the improvement of the health of all people in this Nation.

We urge that the reduction that the President suggests for health funding be rejected, and that at least a 10-percent increase over 1985 levels be awarded to NIH and NICHD. We urge additional funding for research training, and an additional $7 million for health and behavior initiatives.

The federation and APA thank the subcommittee for their continued support of health research, and for giving me this opportunity to share our views with you. I will be glad to answer any questions you might have. Please do not hesitate to call on me or staff at APA or the federation if you need any further assistance.

PREPARED STATEMENT

Senator BURDICK. Thank you for your contribution this morning.

[The statement follows:]

STATEMENT OF DR. CYNTHIA H. NULL

Mr. Chairman and members of the Subcommittee, I am Dr. Cynthia H. Null, Executive Director of the Federation of Behavioral, Psychological and Cognitive Sciences. I am testifying today on behalf of the Federation of Behavioral, Psychological and Cognitive Sciences and the American Psychological Association (APA). Thank you for the opportunity to comment on the FY86 appropriation for the National Institutes of Health.

Behavior is a key factor in successful health promotion and in disease prevention. Two recent reports, "Healthy People" by the Surgeon General and "Health and Behavior" by the Institute of Medicine, document that 7 of the 10 leading causes of death are in large part behaviorally determined. Both reports contain recommendations concerning the influence of life style and diet on the incidence or prevention of illness. Behavioral science research is critical to improving the health of our nation's people.

In this testimony I will focus on behavioral science research at the National Institute of Aging (NIA) and at the National Institute of Child Health and Human Development (NICHD), although important behavioral science research is and must continue to be funded in other institutes as well. I will discuss the health and behavior initiative at NIH and the representation of behavioral scientists on NIH advisory councils. I will close with a discussion of the Administrations's proposed FY86 budget.

Let me begin by applauding your efforts to restore the number of new and competing research awards at NIH to the full 6500 in FY85. We deplore the Administration's directive to reduce the number of awards to 5000 for FY85 -- a clear violation of Congressional intent. It is important to the nation that a strong Federal role in health research be maintained.

National Institute of Aging

The proportion of people in the United States over the age of 65 is steadily increasing and is projected to reach about 21% in 2030. Given the blessing of longer lives, the important question becomes how healthy, active and independent our lives will be. Research being funded by NIA will play a major role in shaping the future of our nation's older population.

Recent research suggests that intellectual decline associated with aging can often be slowed or reversed by relatively simple training interventions.

Although the standardized eye chart may be a good measure of visual acuity under idealized examination conditions, an elderly person may fail to see even large objects under certain lighting conditions. Thus visual perception must be scrutinized within the context of everyday activities.

Age does not affect all senses similarly. It tends to dull the capacity to taste low concentrations of sweet, sour, salt and bitter, but the ability to taste moderate levels remains remarkably functional. The discovery that substances such as caffeine increase taste acuity means that the saltiness of food could be enhanced without increasing the amount of dietary salt. These findings point to intervention strategies that would help to maintain older persons' appetites for food and thus their nutritional status.

One of the best-documented results in aging is that people tend to become slower at most behavioral activities as they grow older. However, no age trend has been found in typing speeds despite substantial age-related decrements in reaction times. Additionally, increased experience tended to compensate for any age-related loss of speed.

Behavioral geriatrics research seeks to understand how health behaviors and attitudes are acquired and their interaction with biological processes to promote or inhibit good health as people age. Research seeks to understand how the elderly utilize formal health care, comply with medical regimens, interpret symptoms and approach death. Research is needed to examine the potential of modifying social environments to enhance health and functioning.

For the elderly, nothing is more terrifying and life altering than Alzheimer's disease. Behavioral scientists are a part of NIA's extensive efforts on Alzheimer's disease. Some areas of research include measuring cognitive decline in Alzheimer's patients, developing early detection techniques and psychophysiological research into causes and treatment.

The report of the HHS Departmental Task Force on Alzheimer's disease set forth a large agenda of "promising directions for future research ... built upon a foundation of basic and applied research in all the biological, clinical, behavioral, and social sciences ...." Reductions in funding at NIA are not consistent with the need for research in this area and the potential benefits that are stated by Secretary of Health and Human Services Heckler in her forward to the Task Force Report.

National Institute of Child Health and Human Development

Children are our future. Insuring that they are born healthy and have the opportunity to achieve their full potential is the mission of NICHD. Research sponsored by NICHD has improved our understanding of both normal and abnormal development.

Currently the field of cognitive development is enjoying a period of unprecedented growth. Research has revealed that babies respond to objects and events and to relationships between objects and events. Infants have an understanding of size and depth and are able to navigate through their environment by using their spatial knowledge. They also appear to be sensitive to emotional expression in others. Infants are aware of not only the existence of objects in a scene but their number. Such work holds promise for gaining an understanding of knowledge development.

During the past two decades much has been learned about the visual capacity of human infants. Research has provided detailed information on the development of visual acuity and on pattern, space and color perception. The methods used to develop this knowledge can also be used to diagnose visual pathology and evaluate early treatment.

At a recent Science and Public Policy Seminar sponsored by the Federation, Dr. Francis Horowitz discussed some of the important ongoing research on infants born at risk. Children who start life differently, behave differently. These different behaviors tend to elicit from parents different kinds of behaviors than normal infants elicit from their parents.

A greater understanding of normal development is essential for increasing our understanding of at risk and abnormal development. Understanding how the environment works and what makes a difference in the normal environment will give us our most powerful set of keys to ultimately helping at risk infants, according to Dr. Horowitz.

Health and Behavior

Mr. Chairman, we wish to commend the leadership you and this Subcommittee are taking in the important and promising research on health and behavior. Behavior has been linked to many health problems including cancer and heart disease. Health-impairing behaviors such as smoking, poor nutrition, heavy drinking, lack of exercise, failure to comply with treatment and delay in seeking medical care are all linked to serious disease. Stress has been linked to physical illness as well.

In recent years there has been a growing awareness that the failure of patients to adhere to prescribed medical regimens is probably the single greatest problem in bringing effective medical care to individual patients.

As you know, a special health and behavior initiative was developed between PHS agencies and supported in the report accompanying the FY85 appropriation bill, but the $7 million to fund this initiative was eliminated from the FY85 budget. Increasing evidence shows that prevention and behavioral medicine could significantly reduce morbidity and mortality from most leading causes of death. An important priority for research is the integration of behavioral and biomedical knowledge in a way that elucidate the mechanisms underlying the interrelationships between behavior and physiological processes.

Representation

We remain concerned about the adequacy of representation of behavioral and social scientists in NIH's advisory system. Despite the fact that a significant amount of research is supported by NIH in these areas of science, they have very few representatives on NIH advisory councils. We strongly believe that the participation of behavioral and social scientists on advisory boards at NIH is necessary to reflect the role of behavior in health and the importance of research in these areas.

FY86 Appropriations

The Administration's FY86 budget request for NIH is $287 million below the FY85 appropriation level. This represents a 5.6% decrease in total funding and a 6.2% decrease in research grants. Although we are sympathetic with deficit reduction efforts, we believe that the health of the people of this nation is too important to have research at NIH cut so drastically. We are, of course, concerned that the approximately 3% of the NIH funds which go to support behavioral and social science research should not be cut; in fact they should be increased. Having established the importance of behavior in health, it is critical that NIH place a stronger emphasis on behavioral and social science research.

Because research at NIH is so important, we support a level of approximately 6,500 new and competing individual investigator-initiated research grants for FY86 instead of the 5000 proposed by the Administration. By proposing to reduce the number of grants in both FY85 and FY86, the Administration is taking an action that will seriously disrupt the Nation's long-term research capacity and dim our hopes of reaching national goals of a healthier American population.

Research on aging is too important to suffer under the Administration's reduction. We urge the Subcommittee to support an increase in the NIA budget of 10% over the FY85 level. We also urge this Subcommittee to reject the budget reduction proposed by the Administration for NICHD and increase support to $347.2 million, a 10.7% increase over FY85.

We urge this Subcommittee to continue its leadership in the area of research on health and behavior and put $7 million into the FY86 appropriation for a health and behavior initiative at the HHS Department.

NIH research training would be funded at $218 million in the Administration's FY86 budget, which is the same level of support as FY85. These funds will support fewer trainees because of a long overdue stipend increase. We urge the Subcommittee to increase funding for research training so the number of trainees will not be reduced.

Conclusions

We share with you a strong concern for consistency of funding for health research by the Federal government. It is important to the training of future generations of scientists, the treatment and prevention of illness, the birth of healthy and wanted babies, increased functioning of the elderly and the improvement of the health of the people of this nation. We are grateful for the continued support of this Subcommittee, and we urge:

- rejection of the President's reductions in funding for health research,
- at least a 10% increase over the FY85 level for NIA,
- at least a 10% increase over the FY85 level for NICHD,

- additional funding for research training, and
- the addition of $7 million for the health and behavior initiative.

The Federation and APA thank the Subcommittee for their continued support for health research and for giving me this opportunity to share our views with you and the Subcommittee. Please do not hesitate to call on me or Federation or APA staff if we can be of further assistance.

Senator SPECTER. Mr. Chairman, I do not have a question at this time, but I would like to submit some questions for the record, Mr. Chairman, if I might, if they might be asked for response to the record. I wanted to be present for at least a few moments because of the important testimony received here, but I have to go elsewhere.

Senator BURDICK. Certainly.

Senator SPECTER. Thank you very much.

Thank you, Dr. Null.

STATEMENT OF EDWIN CADMAN, M.D., PRESIDENT, AMERICAN FEDERATION FOR CLINICAL RESEARCH

Senator BURDICK. Our next witness is Edwin Cadman, M.D., president of the American Federation for Clinical Research. Welcome to the committee, Doctor.

Dr. CADMAN. Mr. Chairman, and committee:

I am Dr. Edwin Cadman, a professor and director of the Cancer Research Institute at the University of California at San Francisco. My specialty is oncology, and I do research on cancer.

I come to you today as the president of the American Federation for Clinical Research, an organization of 12,000 biomedical researchers whose goal is to apply new scientific knowledge to the clinical practice of medicine, and thus improve the health of our country.

I strongly support an NIH budget which will help achieve this goal. AFCR recommends $5.7 billion for NIH in fiscal year 1986. The President, on the other hand, has recommended a decrease in funding to $4.8 billion.

AFCR has identified four areas in the 1986 NIH appropriation which we believe are crucial for developing the cadre of clinical researchers which the Nation will need in the years ahead.

The AFCR recommends the following increases over fiscal year 1985:

First, we recommend that $363 million be added to fund 6,500 new and competing research grants, maintaining the level authorized by Congress last year. We appreciate the high priority that Congress placed on biomedical research in 1985, and your continued efforts to champion full 1985 funding for biomedical research following OMB's reassignment of funds.

Second, AFCR recommends at least a $5.5 million increase for the general clinical research centers. These centers are both a place for transferring scientific discoveries from the laboratories to the bedside, and an entry point for future clinical investigators.

Third, AFCR recommends $22 million over the 1985 appropriation for research training to support the 10,518 trainees recommended by the National Academy of Sciences. Rigorous training is crucial for success as an independent investigator. AFCR believes that insufficient funding for research training will result in a loss of biomedical scientists.

Four, AFCR recommends the addition of $3.3 million to the research career development programs. These programs provide 1,336 highly competitive awards to outstanding young junior faculty members or fellows. The awards encourage physicians to enter investigative careers on medical school faculties.

In summary, the AFCR recommends that your committee support an appropriation of $5.7 billion for NIH in 1986. This $5.7 billion represents a 10.7-percent increase over 1985, whereas the President is recommending a 6-percent decrease. This increase is not exhorbitant when you consider that the President has also recommended a 22-percent increase in the research and development budget for the Department of Defense.

AFCR is one of over 130 cosponsors of this NIH budget increase as proposed by the ad hoc group for medical research funding. We firmly believe that our request is consistent with the health research needs of our country. The biomedical knowledge and technology is a natural resource of this country, which has been nurtured to a state of paralleled excellence exceeded by no one. The potential benefits of this long tradition of excellence in the search of the understanding of disease are enormous.

The health of our Nation has depended on the vitality of our biomedical researchers. The NIH budget is our life support system. We urge Congress to keep the plug in the socket.

We are delighted with the efforts of you and your committee. You have recognized these unprecedented opportunities in biomedical research. On behalf of the AFCR, I thank you.

PREPARED STATEMENT

Senator BURDICK. Thank you, Dr. Cadman. Your statement will be inserted in the record.

[The statement follows:]

STATEMENT OF DR. EDWIN CADMAN

The American Federation for Clinical Research is an organization of 12,000 biomedical researchers. Our membership possesses the ability to apply new scientific knowledge to the clinical practice of medicine. We place particular emphasis on encouraging young medical researchers and view the role of research training, and other federal initiatives for developing new talent, as vital to the advancement of American medicine.

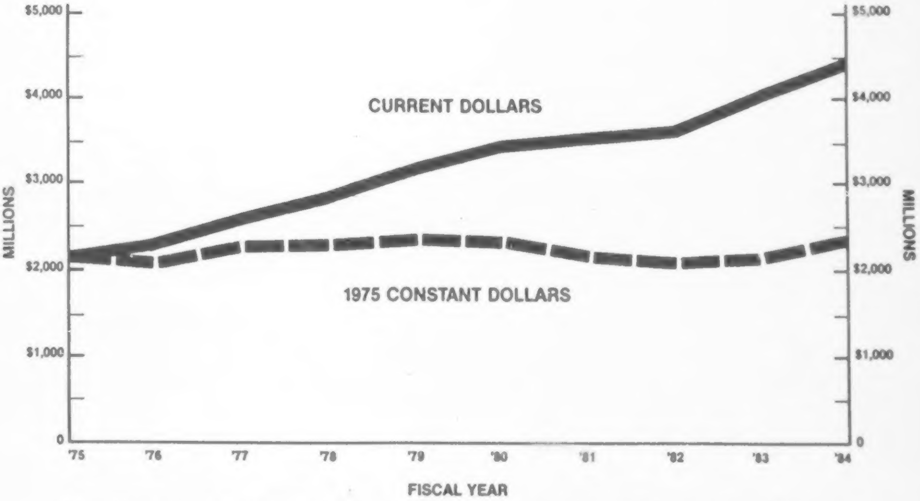
I am here today to lend strong support to a full National Institutes of Health budget. The AFCR recommends 5.7 billion dollars for NIH in fiscal year 1986. The President, on the other hand, recommended a 6 percent decrease in funding for NIH to $4.8 billion. This, despite the acknowledgement by the President's science advisor George Keyworth that, "The biological sciences stand on a brink of understanding that I can only liken to the brink that Einstein saw for physics in 1905." A decrease in funding such as the President proposed will have far-reaching implications and will adversely affect biomedical research.

Advancement in science and medicine occurs slowly; almost imperceptably, across many disciplines. The federal investment in medical research has produced a deep reservoir of knowledge and experienced personnel. As Dr. Jacques Padawer wrote recently in the New York Times in response to a Times editorial, "Science needs a critical mass and the proper ecosystem lest it perish like an endangered species."

The benefits of the federal investment in biomedical research are returned directly to individual taxpayers in the form of improved health and quality of life. In addition, the federal investment also provides industry with the basic research it needs to produce new products, provides jobs for thousands of workers, and provides the nation with international prestige as a leader in biomedical research.

These many benefits will not continue to accrue if we do not invest in our future. West Germany and Japan are already investing a larger percentage of their GNP in civilian research and development than the U.S. As you can see on this chart, the U.S. investment has been nearly constant for 10 years, barely keeping pace with inflation, despite the efforts of your committee. The annual Federal investment in medical research is only $25 per person, while health care expenditures are $2,000 per person each year.

NIH OBLIGATIONS IN CURRENT AND CONSTANT[1] DOLLARS[2]
FISCAL YEARS 1975-1984[3]



[1] Constant dollars are based on biomedical research and development price index
[2] Excluding programs that have been transferred out
[3] Preliminary data provided by NIH, Office of Program Planning and Evaluation, Division of Program Analysis, PAB

The AFCR has identified four areas in the FY86 NIH appropriation which we believe are especially important for developing the cadre of clinical researchers which the nation will need in the years ahead. The AFCR recommends the following increases over fiscal year 1985 NIH appropriations:

1) $363 million for approximately 6,500 new and competing renewal grants
2) $5.5 million for General Clinical Research Centers
3) $22 million for research training support to 10,518 trainees, the number recommended by the National Academy of Sciences
4) $3.3 million for research career development programs

First, we recommend that NIH appropriations fund 6,500 new and competing research grants at study section recommended levels. This would enable NIH to award grants to approximately 38 percent of the approved grant applications, maintaining the level authorized by Congress last year. The President's budget would reduce the number of extramural grants funded to 29 percent of approved grants, or less than one-third of the excellent science ideas presented to the NIH. The President states in his budget message that he wishes to "restore stability" by funding 5,000 new grants each year. The AFCR strongly disagrees with the President's concept of stability. Fixing the number of grants without regard to the opportunities available is short-sighted and will have serious implications for the future of biomedical research.

Maintaining a steady and sufficient source of federal funding is particularly important to new entrants into the ranks of researchers. When only a very select few of those who apply for NIH funding receive a grant, the perception of the probability of success in a biomedical research career is diminished. Because NIH provides almost two-thirds of all national support for health-related research and development in the country's academic centers, decreases in NIH grant funding have profound implications for medical researchers. The increases recommended last year by your Committee were needed and provided AFCR members with a very positive sense of the future for health research initiatives. We appreciate the high priority Congress placed on biomedical research in FY85 and your continued efforts to champion full FY85 funding for biomedical research following OMB reassignment of funds. The AFCR strongly urges you to appropriate $3.149 billion for extramural grants to fund both the 6,500 FY85 grants for a second year, and 6,500 new and competing renewal grants in FY86.

Second, the AFCR recommends at least a $5.5 million increase for the General Clinical Research Centers or GCRC. The GCRC program, established in 1962, today includes 76 units at medical centers throughout the nation. The GCRCs are both a place for transferring scientific discoveries from the laboratory to the bedside and an entry point for future clinical investigators. The GCRC patient beds provide a center for clinical research where more than 3,500 projects are conducted each year. In fact, 80 percent of the patient-oriented research performed under NIH extramural grants utilizes the facilities of the GCRCs. The GCRCs are influential in stimulating young researchers through on-site medical student exposure to clinical research and through the very selective Clinical Associate Physician program. Despite the importance of the GCRC units the funding for the program has been shrinking. The AFCR urges that you appropriate at least $93.6 million in FY86 for the GCRC program and requests that the $5.4 million cut by OMB from FY85 be reinstated.

Third, the AFCR recommends $22 million over the FY85 appropriation for research training to support the 10,518 trainees recommended by the National Academy of Sciences. In the current fiscal year the NIH is supporting 9,891 research trainees through the National Research Service Awards program. The President's budget would freeze the number of trainees and their support funds at this year's level. The AFCR believes that the loss of 627 future biomedical scientists will have serious implications for clinical research. Analyses of successful new NIH grant recipients show that long and rigorous training is crucial to success as an independent investigator. The National Research Service Awards program provides such training for physician investigators and thus is essential to the vitality of the biomedical research enterprise.

Fourth and finally the AFCR recommends the addition of $3.3 million dollars to the research career development programs. These five programs provide 1,336 highly competitive awards to outstanding junior faculty members or fellows. These awards are crucial in providing the resources for many of our most promising research trainees to make the transition to successful careers as biomedical investigators. These are particularly important programs because they encourage physicians to enter investigative careers at a time when the number of physician investigators is steadily declining from 32 percent of new investigators in 1968 to 15 percent in 1982. Therefore, the AFCR supports an appropriation of at least $78.6 million for the research career development programs.

In summary the AFCR recommends that your committee support an appropriation of $5.704 billion for NIH in FY86. $5.704 billion is $555 million over FY85 and represents a 10.7 percent increase. Such an increase is not exorbitant when you consider that the President recommended an increase in the research and development budget of 22 percent for the Department of Defense. The AFCR is one of over 130 co-sponsors of this NIH budget increase as proposed by the Ad Hoc Group for Medical Research Funding. We believe that our request is consistent with the health research needs of the country and takes advantage of the unparalleled opportunities currently available in biomedical research

The AFCR looks forward to working together with the Congress to ensure the continuation of a strong and productive medical research enterprise. Together we can ensure that the opportunities which are available now will not be put aside and that the investment in biomedical knowledge will continue to compound. On behalf of the AFCR I thank you for your time and will be happy to answer any questions.

STATEMENT OF GARY L. FRANCIONE, ASSISTANT PROFESSOR OF LAW, UNIVERSITY OF PENNSYLVANIA

Senator BURDICK. Our next witness will be Gary L. Francione, assistant professor of law at the University of Pennsylvania.

Mr. FRANCIONE. First of all, I would like to thank you for permitting me to testify before the committee this morning. I am only sorry that Senator Specter was unable to remain with us.

I am here today in connection with federally funded head injury research at the Head Injury Clinical Research Laboratory at the University of Pennsylvania. This research has been going on now for 15 years, and it has been funded by the National Institutes of Health.

This year alone, NIH officials have indicated that the project will receive over $1 million from NIH, and researchers have requested over $6 million over the next 5 years for these experiments.

In these experiments, primates, usually baboons, have their heads encased in a dental-stone helmet. The dental-stone helmet is then placed in an acceleration device, and the animals have their heads severely injured by the use of the acceleration device.

The brains are then frozen, and the animals are decapitated, and the brains are sent to the University of Glasgow for neuropathological studies. These animals are unanaesthetized at the time of the injury.

Sometime over the Memorial weekend of 1984, a person or persons unknown entered the University of Pennsylvania Head Injury Clinical Research Laboratory and removed copies of videotapes that had been taken by the researchers themselves. These tapes show conscious, unanaesthetized primates struggling in their restraints as they had their heads injured. They show researchers performing surgery on unanaesthetized primates, researchers mocking animals, researchers failing to perform sterile surgery, and researchers using a hammer and chisel to crack off the dental-stone helmet after supposedly precise head injuries had been inflicted.

The tapes clearly show what appear to be violations of the Animal Welfare Act and the NIH guide for the care and use of laboratory animals.

Portions of these videotapes have been distributed throughout the United States and Europe, and prominent physicians, veterinarians, and research scientists have condemned the research as being inhumane and as involving sloppy research procedures that seriously invalidate the experimental data.

I would also add that I showed the tape to members of the law faculty at the University of Pennsylvania, and approximately one-half of our full-time law professors signed a letter to Sheldon Hecky requesting that a dialog be held on the research.

The USDA is conducting an investigation currently, but the USDA does not have the power to cut off the funding of the research, NIH does. Although NIH states that it is conducting an investigation, certain events have led the humane community and others to question the integrity of that investigation. Let me cite a few examples.

First of all, immediately after the tapes were removed from the Head Injury Research Laboratory, the Director of the NIH, Dr. James Wyngaarden, Dr. Raub of Extramural Training and Research, and Dr. Walker of NINCDS made statements supportive of the lab without review of the evidence that had been obtained.

No. 2, in September 1984, NIH threatened to boycott the health subcommittee hearings if the tapes were shown. The tapes were not shown to the subcommittee, even though they had been scheduled to be shown NIH has made countless statements that animal rights groups that had copies of the tapes have failed to provide copies of those tapes to NIH. That is clearly incorrect and represents a serious misrepresentation by Dr. McCarthy and others who have made those representations.

Earlier this year, NINCDS conducted a site visit of the lab. They refused to give me the names of the site visitors even though I had made a timely request for them until I had agreed not to contact the site visitors. When I objected to that, they gave me the names over objection.

When I asked NINCDS whether the site visitors to the project would be apprised of the controversy surrounding the lab, I was told that NINCDS was relying on the fact that the site visitors would be reading the newspapers.

I respectfully request that the subcommittee stop the funding or move to stop the funding at least until an impartial, thorough, and fair investigation of the Head Injury Clinical Research Laboratory is accomplished by NIH. I would also ask that a staff member of this committee monitor the investigation because of the bias that NIH has shown in connection with the controversy.

Thank you very much. I am going to give you some documents and video evidence that I think is very important, and I would ask that you put them in the record.

Senator BURDICK. They will be received.

Mr. FRANCIONE. Thank you, Senator.

PREPARED STATEMENT

Senator BURDICK. Senator Specter has requested that you answer a question that he is going to submit. You can do that in your own time.

[CLERK'S NOTE.—No response to date.]

[The statement follows:]

STATEMENT OF GARY L. FRANCIONE

Republicans and Democrats alike are calling for a reduction in federal spending in order to trim the deficits that are threatening the financial stability of our Nation. It is imperative that we respond to this bipartisan call by attempting vigorously to identify and excise any and all instances of waste in the federal budget. In connection with this concern, I wish to discuss briefly a project that is consuming millions of federal dollars in a manner that is clearly unjustifiable.

For the past fifteen years, the National Institutes of Health have been funding the Head Injury Clinical Research Laboratory at the University of Pennsylvania. In a claimed effort to understand human head injuries, this laboratory has conducted experiments in which head injury is purposely inflicted on primates. The principal investigator of the research is Dr. Thomas W. Langfitt and the director of the laboratory is Dr. Thomas A. Gennarelli.

In their experiments, the researchers encase a primate's head in a dental-stone helmet and insert the encased head into a device that accelerates the head of the unanaesthetized primate with a pneumatic piston, inflicting a force as great as 1,000 times the force of gravity. A force of 15 times the force of gravity can kill a human being. Many animals are injured repeatedly over prolonged periods and then are killed by having their brains frozen with liquid nitrogen. The brains are sent to the University of Glasgow (Scotland) for neuropathological studies.

Despite the many years of federally-funded research, these experiments have produced results acknowledged by one member of Gennarelli's research team to be "academic rather than practical" in nature. (Dr. James Hume Adams, Glasgow Herald, December 1, 1983). Another group of scientists using animals in head-injury research has stated that Gennarelli's animal research has "not been useful for the evaluation of treatment modalities." (Nelson, et al., A Comparison of Animal Head Injury Models Developed for Treatment Modality Evaluation (1982)).

Sometime during late Spring 1984, a person or persons unknown entered the laboratory and removed approximately sixty hours of videotapes that had been filmed by researches themselves. These shocking videotapes show many disturbing events including: conscious primates struggling violently as they are tied to the operating table and injured by the acceleration device; animals writhing in pain as they are subjected to cranial surgery without anaesthesia by researchers who explicitly acknowledge that the animals are suffering but fail to provide relief; animals removed from the dental-stone helmet by the use of a hammer, or a hammer and chisel, to "crack" the helmet off the head; researchers failing to perform sterile surgery and smoking cigarettes and pipes at the operating table; and researchers mocking and joking about the injured animals and forcing them to "pose" before the camera. The tapes clearly show what appear to be violations of the federal Animal Welfare Act, 7 U.S.C. SS2131 et seq., the NIH Gude to the Care and Use of Laboratory Animals, and Pennsylvania state law.

Shortly after the videotapes were removed, the United States Department of Agriculture conducted an inspection of the facilities used to house the animals injured in the experiments, and found seventy-four serious violations of the federal Animal Welfare Act. The inspector noted, among other things, that there was "a buildup of urine and debris on walls and floors of all rooms," that there were "cockroaches everywhere you look," and recommended that "all animals should be moved out of there immediately." On December 27, 1984, the U.S.D.A. conducted an inspection of the laboratory itself accompanied by Dr. Gennarelli. The inspector reported that "the sanitation, cleaning and housekeeping, and ventilation in [the laboratory] did not comply with the minimum requirements of the Animal Welfare Act." The inspector also reported that the "head injury apparatus and some surgical tools were stained with blood" and that Dr. Gennarelli admitted that the apparatus was "not being properly cleaned." The laboratory is continuing these tragic experiments despite the fact that the facilities are not in compliance with federal law and regulations.

Various portions of the videotapes removed from the laboratory have now been widely distributed and displayed throughout the United States and Europe, and have evoked strong reactions from those persons, including physicians, veterinarians, and research scientists, who have viewed them. For example:

(1) Dr. Sheella Mierson, Professor at the Medical College of Virginia, stated that "Dr. Gennarelli's research is questionable, both ethically and scientifically." (Letter from Dr. Mierson to Senator Heinz, April 12, 1985).

(2) Dr. P.D. Wall, Professor of Medicine and Director of the Cerebral Functions Group at University College London (Department of Anatomy and Embryology) has stated that "these animals were not anaesthetized at the time of the head injury." (Letter from Dr. Wall to Clive Hollands, December 17, 1984).

(3) Dr. Herbert Rackow, Professor of Anesthesia (Emeritus) at the Columbia University College of Physicians and Surgeons, has stated his opinion that "the baboons were subjected to such very severe pain that regardless of the potential value of the experiments, they should not have been permitted." (Letter from Dr. Rackow to Mr. Pacheco, October 19, 1984).

(4) Dr. Ned Buyukmihci, Professor at the University of California (Davis) School of Veterinary Medicine, stated many of the animals "were clearly not anaesthetized when they suffered trauma" and that the use of the hammer and chisel to "crack" the dental-stone helmets from the animals' heads added "a highly uncontrolled variable to the experiment, particularly since there could be compounding of minor damage to those animals subjected to lesser trauma." (Statement of Dr. Buyukmihci) It should be noted that Dr. Gennarelli has admitted that he never revealed the use of the hammer and chisel in his grant application submitted for

federal funding, or in any of his published papers. (See Almanac, February 19, 1985, at page 11).

(5) Dr. Jay Glass, a brain-research scientist formerly on the faculty of the University of Pittsburgh School of Medicine, has stated his view that the animals were not anaesthetized and that the research procedure was "inadequate" and threatened the validity of the experimental data. (Statement of Dr. Jay Glass).

(6) Dr. Richmond C. Hubbard, a physician who is Chairperson of the Medical Research Modernization Committee consisting of over 600 scientists, clinicians, and academicians, has stated for the Committee that Dr. Genneralli's research is "unnecessary, duplicative and a waste of money," and that the research "is being conducted in an inhumane fashion and in a way that invalidates the experimental data." (Statement of Dr. Hubbard).

The list goes on and on, and includes objections by many professionals who are otherwise supporters of animal research. In addition to these scientists, noted philosophers Dr. Peter Singer and Dr. Tom Regan have condemned Dr. Gennarelli's experiments.

Despite these concerns that the animals involved have been treated inhumanely, and that the procedures were technically inadequate to generate valid results, the National Institutes of Health continue to use our tax money to support this project. The project was funded generously through July 31, 1985 and officials at NIH have indicated that the laboratory will receive the amount requested for the year August 1, 1985 to July 31, 1986 -- $1,219,439. The researchers have requested an additional $6,253,807 for the next five years.

In my view, the NIH is failing to fulfill its obligation to the American public by continuing to fund this project without a proper investigation of allegations made by countless individuals and organizations, including the Humane Society of the United States. Instead, various NIH officials, including Dr. James Wyngaarden, have made public statements supportive of the laboratory in the complete absence of their review of the evidence.

The evidence available at this point indicates that grave improprieties occurred in the conduct of this research, which is financed generously by the federal government through the National Institute of Health. I respectfully request:

(1) that there be a moratorium on all animal experimentation at the Head Injury Clinical Research Center pending a full investigation by a committee convened by the NIH. This committee should include representatives of the humane community who have voiced concern about the research;

(2) the withholding of Federal funds by the National Institutes of Health from the laboratory pending the completion of this investigation and publication of the findings;

(3) a full disclosure of all sources of funding of the laboratory and an accounting of the allocation of all funds.

STATEMENT OF CAROLYN SLAYMAN, PH.D., PROFESSOR AND CHAIRMAN, DEPARTMENT OF HUMAN GENETICS, YALE UNIVERSITY SCHOOL OF MEDICINE

Senator BURDICK. Our next witness is Carolyn Slayman, Ph.D., professor and chairman of the department of human genetics, Yale University School of Medicine.

Ms. SLAYMAN. Thank you, Mr. Chairman.

I am Carolyn Slayman, and I am here to testify today on behalf of the fiscal year 1986 appropriations for what I consider to be the most important of the NIH institutes, the National Institute of General Medical Sciences.

As chairman of the department of human genetics at Yale, I believe that a strong NIGMS budget is critically important to research in genetics and other areas of basic biomedical science. As administrative head, until recently, of our department's Ph.D. program, and as the chairman of the NIH study section that reviews training grant applications in the field of genetics, I believe equally strongly in the role of NIGMS in research training.

Let me address these two topics in turn. First, research.

My field, genetics, shows a promise of changing health care in a fundamental way. Mutations in specific genes are now known to cause at least 3,500 human disorders, including cystic fibrosis, Tay-Sachs disease, sickle-cell anemia, and Huntington's chorea. In addition, there are genes that determine the likelihood of developing major illnesses, such as heart disease, cancer, diabetes, and even mental illness.

The recombinant DNA revolution has taught us how to clone such genes and turn them into probes that can be used to screen children and adults so that, in principle, genetic effects can be detected before they manifest themselves. The next step will be gene therapy in which defective genes are replaced by healthy ones.

For this kind of preventive medicine to become a reality, much needs to be learned about the fundamental aspects of gene structure, gene targeting, and the regulation of gene expression during the development.

In my department at Yale, 16 faculty members together with their students and research assistants are pursuing a variety of topics in genetic research. Some are studying the structure and function of specific genes from human cells or viruses; others are refining methods for detecting and mapping genes; still others are active in prenatal diagnosis and fetal medicine. Eighty-five percent of the grant support that keeps these laboratories running comes from the National Institutes of Health, much of it from NIGMS.

It has been argued that a freeze or cutback in the NIH budget would be quickly compensated for by increased research support from industry. To me, the record suggests otherwise. While the biotechnology industry has been growing dramatically, such companies are mainly, and understandably, interested in practical applications of genetic research for making drugs, making chemicals, and agricultural products. The fundamental knowledge of cell biology, molecular biology, and genetics that support these applications has come, and will continue to come, largely from federally sponsored research.

Next let me turn to training. In my department, 30 graduate students are working toward the Ph.D. degree in genetics and 50 postdoctoral students are receiving more advanced research training. They are typical of the many bright, energetic young people at universities around the country who are spending on the average 8 to 10 years after graduating from college to learn a scientific field in sufficient depth that they can some day direct a research program.

In return to their commitment, which is surely the single most important element in the future of research in our country, these young scientists need to know that the Government is willing to devote a small but steady portion of its budget to research training. Nothing is more unsettling than to discover that training slots are being eroded by lack of funds. Nothing has a greater negative impact on student morale than to see faculty mentors struggling over grant applications, trying to eke out support in a lean year so that students can pursue their work.

In summary, I believe that this subcommittee and the Congress acted wisely last year by providing funds for 6,500 NIH grants. I deplore the current OMB initiative attempting to cutback this funding. I hope that you will continue to give vigorous support to both research and training. Of all the NIH institutes, I think that NIGMS deserves your special attention because of its very important role in fundamental research, and because it carries the bulk of the responsibility for training.

Thank you very much.

PREPARED STATEMENTS

Senator BURDICK. Thank you, Doctor. We will insert your statement in the record at this point along with other statements submitted for the record on National Institutes of Health—General.

[The statements follow:]

Statement of Dr. Carolyn Slayman

Thank you for the opportunity to testify on behalf of the Fiscal Year 1986 appropriations for the National Institute of General Medical Sciences. As Chairman of the Department of Human Genetics at Yale Medical School, I believe that an enhanced NIGMS budget is critically important to research in genetics and other areas of basic biomedical science. As the administrative head until recently of our department's Ph.D. program, and as a member of the NIH study section that reviews training grant applications in the field of genetics, I believe equally strongly in the role of NIGMS in research training. Let me address these two topics in turn:

First, research. My field--genetics--shows promise of changing health care in a fundamental way. Mutations in specific genes are now known to cause at least 3,500 human disorders, including cystic fibrosis, Tay-Sachs disease, sickle-cell anemia, and Huntington's chorea. In addition, there are genes that govern the likelihood of developing heart disease, cancer, diabetes, and even mental illness. The recombinant DNA "revolution" has taught us how to clone such genes and turn them into probes that can be used to screen children and adults so that, in principle, genetic defects can be detected before they manifest themselves. The next step will be gene therapy, in which defective genes are replaced by healthy ones. For this kind of preventive medicine to become a reality, much needs to be learned about fundamental aspects of gene structure, gene targeting, and the regulation of gene expression during development.

In my department, 16 faculty members together with their students and research assistants (about 150 people in all) are pursuing a variety of topics in genetic research. Some are studying the structure and function of specific genes from human cells or viruses; others are refining methods for detecting and mapping genes; still others are active in prenatal diagnosis and fetal medicine. 85% of the grant support that keeps these laboratories running comes from the National Institutes of Health, much of it from NIGMS.

It has been argued that a freeze or cutback in the NIH budget would be quickly compensated for by increased research support from industry. To me, the record suggests otherwise. While the biotechnology industry has been growing dramatically, such companies are mainly interested in practical applications of genetic research for making drugs, chemicals and agricultural products. The fundamental knowledge of cell biology, molecular biology, and genetics that supports these applications has come, and will continue to come, largely from federally sponsored research.

Next, let me turn to training. In my department, 30 graduate students are working towards the Ph.D. degree in genetics and 50 postdoctoral students (M.D.'s and Ph.D.'s) are receiving more advanced research training. They are typical of the many bright, energetic young people at universities around the country who are spending (on the average) 8 to 10 years after graduating from college to learn a scientific field in sufficient depth that they can someday direct a research program. In return for their commitment, which is surely the single most important element in the future of research in our country, these young scientists need to know that the government is willing to devote a small but steady portion of its budget to research training. Nothing is more unsettling than to discover that training slots are being eroded by lack of funds. Nothing has a greater negative impact on student morale than to see faculty mentors struggling over grant applications, trying to eke out support in a lean year so that students can pursue their work.

In summary, I believe that Congress acted wisely last year by increasing funds for NIH grants, and that it should continue to give steady, vigorous support to both research and training. Of all the NIH Institutes, NIGMS deserves special attention because of its role in fundamental biomedical research and because it carries the bulk of the responsibility for training.

STATEMENT OF PHIN COHEN, M.D.

I was a principal investigator (PI) whose grants were mismanaged by Harvard University. When I complained to university administrators about the mismanagement, I was terminated and my mental stability was questioned. Prior to my termination, I had been unanimously recommended by an Ad Hoc Committee for a promotion with a 5 year term.

I reported the matter to the National Institutes of Health (NIH) and told NIH auditors that I thought the mismanagement went beyond my grants and was, in fact, widespread. NIH did an audit which confirmed my allegations with respect to my 3 grants as well as 2 other grants.

On the basis of these findings, the Director of the NIH audit group shared my belief that the mismanagement might be widespread and requested in a letter of 10 June 1976 that the then - HEW audit agency do a general audit of the School of Public Health and all other schools which receive federal grants at Harvard. Twenty days later I was on the street and the people who mismanaged the money were still in place, as if nothing had happened.

In April, 1977, with no apparent sign of follow up audit activity by HEW, I filed a Complaint in court asking for an audit as well as compensatory restoration of my career. I quote from paragraphs 44 and 45 of that Complaint:

> "44. Based upon information and belief, it is alleged that a general audit of federal grants and contracts at Harvard would show wide-spread and large-scale misuse of federal awards, for the relevant period, as well as many preceding years involving millions of dollars. These improprieties derived from Harvard's unlawful and illegal acceptance of the fungibility of direct cost awards. Harvard has knowingly permitted and fostered pooling, fungibility and arbitrary and illegal allocation of direct costs. This attitude has resulted in wide-spread and large-scale and illegal redistribution of direct costs in contravention of federal law, regulations and policies and violates the spirit and intent of the peer review system.
>
> 45. Based upon information and belief, Harvard knowingly misused, misappropriated and sequestered indirect costs with the same disregard for federal law, regulations and policies. For the relevant and presently undefined preceding period, Harvard treated all indirect costs from federal awards as allocable to fiscal obligations without due regard to whether those obligations derived from 'benefiting activities'. During the period 1970-1976, Harvard applied for, negotiated for, and received approximately one hundred million dollars in indirect cost awards in connection with federal grants and contracts, of which approximately forty percent was awarded to the medical area in Boston. By sequestration and misappropriation of these indirect costs, Harvard violated federal laws, regulations, and policies, and also denied the rights of and hampered the scientific pursuits of principal investigators whose work would have benefited from all of the support that their indirect cost awards were supposed to have provided."

In paragraph 60 of that Complaint, I asked that the court order HEW to do an audit, and alleged that Harvard had filed false vouchers with the federal government. That, like the wording in paragraphs 44 and 45 of the Complaint, was strong stuff. Just how strong has lately been emphasized by the dim view that federal auditors and federal courts take when defense contractors falsify vouchers.

HEW, although informed of the Complaint, and the request in paragraph 60 for a court-ordered audit, did nothing to get the audit started until I raised a fuss in Washington.

The audit finally got started in September, 1977. Now, 8 years later, that audit, which my legal Complaint precipitated, has been mostly settled. My predictions of April, 1977, have come to pass in ways and on a scale to match the strong wording which my lawyer and I hammered out in the Complaint. The bottom line, as reported by the auditors, is, so far, 15 million dollars, approximately 5 million in direct costs and 10 million in indirect costs.

I am now giving testimony because 15 million dollars is a huge amount of flesh to have been put on the bones of my written prophecies of April, 1977. If the audit of Harvard had found very little, paragraphs 44 and 45 would be dismissed as an expression of free speech by a crackpot. But when allegations of the magnitude set forth in paragraphs 44 and 45 are found to have been accurate, the words of those paragraphs acquire a standing which defines the credibility of the speaker. Now, as a person with proved credibility, I address my concerns to you regarding the vulnerability of PI's who try to prevent their grants from being plundered.

To give this perspective, let's discuss the role of the PI. First, let's discuss his responsibilities. Then let's ask the corollary: What are his rights? First, the responsibilities:

1. He writes the grant proposal. This doesn't mean, for example, that the university says we'll work on liver disease, so you write a grant on liver disease. It means that the federal government is interested in liver disease, the taxpaying citizenry have liver disease among them and the PI is interested in doing research on liver disease based on his own experience and curiosity. The university is not part of the selection and review process. In fact, the obtaining of a grant often precedes and is precondition for a PI's university appointment. The university wants PIs who can raise money to pay their own salaries, money to pay for technicians, supplies and equipment, money in the form of indirect costs. It wants the money that flows from good research. But the project - that's

really the PI's choice and the PI's choice depends on the currents that flow in science.

The competition for grants is now, and has been for the past 15 years, fierce. The PI faces this competition; the university does not. It is the PI's record of productivity, creativity and scientific reliability - in short his reputation, the very soul of his career - which the peer review committees (which importantly are deputized as federal bodies for the purpose of peer review) use as a platform upon which to judge the worthiness of the application. The stamp of approval of peer review is a sine qua non of scientific approval by the university. So, the university benefits from an external review process which, they won't admit it, means as much to them as any criterion whatsoever for academic status in science. Favorable peer review helps immeasurably with appointments, reappointments, promotion and tenure. Make no mistake about that.

2. If the PI wins in the competition, he survives. If he repeatedly loses in the competition, he will not be reappointed or promoted. The university wants money and prestige. PIs who win in peer review bring in money and prestige.

3. If the PI wins the grant, he must be productive to win further grants.

4. If the PI misuses federal funds, he can be prosecuted in federal court. I have the court records of 5 PIs who have been criminally prosecuted and convicted. I understand that for every record I have, there are another 6 or 7 just from the past several years. I'm not representing or feeling sorry for these PIs, I am merely stressing that the federal government as a rule looks to the PIs, not to administrators, or anyone else, to criminally prosecute for grants mismanagement.

In short, if anything goes wrong with the grant from lack of productivity to manipulation of funds, the PI is the very first person to be looked to as a responsible surrogate for the government in affairs with the university, and surrogate for the university in affairs with the government.

These are heavy responsibilities. You might think that they are matched by rights of equal weight. I am living proof that they are not. When I tried to defend my grants, I was terminated.

What are the PI's rights? Put simply, what happens if the PI, not the university, not the government, not anyone else, sees wrongdoing, specifically, the misuse of his hard won federal funds by the university, and speaks out about it and loses his job because he has spoken out? Are those who hold him responsible for so many things there to give him succor? The answer is: NO! The PI who has committed a crime is likely to get more due process than the PI who has been fired for pointing out wrongdoing with federal monies by the university. The PI who is fired for complaining about the misuse of his hard won federal grants, who is subject to personal attack and intimidation by the university, has no rights, and those who would hold his feet to the fire if he were the wrongdoer seem strangely silent and aloof when the PI points out wrongdoing and is excoriated and humiliated for it. When it comes to preventing his grants from being plundered, the PI has a terrible dilemma. If he doesn't complain, his work is hampered; if he does complain, he can lose his job.

As an unfrocked PI whose career was shattered because he took his stewardship of public funds seriously, I respectfully suggest that you attach a rider to an appropriation bill which states in effect:

> "Any PI shall not be punished, expelled or sanctioned in any way for raising questions regarding the management of a federal grant or contract on which he is the PI."

Such a rider would strike a blow for academic freedom and fiscal accountability at the same time. The tripartite relationship among the federal government, the PIs and the universities needs strengthening. None of these 3 partners can do without the other. The PI, by far the weakest of the three, needs your protection.

PIs need to keep their grants to do their work. They also need federal rights which are commensurate with their federal responsibilities.

STATEMENT OF HAROLD K. LONSDALE, PRESIDENT, BEND RESEARCH, INC.

In 1982, Congress enacted the Small Business Innovation Development Act, P.L. 97-219. That Act provides for a small set-aside of the R&D budget of each of the largest R&D-sponsoring agencies of the U.S. Government, to be used exclusively to fund innovative ideas emanating from small hitech U.S. firms. The resulting Small Business Innovation Research (SBIR) program is now almost 2½ years old and every serious appraisal ranks it as a major success in coupling Government-sponsored R&D to improved innovation and job creation in our country. (See my comments in the attached statement to the U.S. House of Representatives Small Business Committee, Subcommittee on General

Oversight and the Economy, dated April 25, 1985, and entitle "The SBIR Program and America's Economic Future".)

The firms that are participating in the SBIR program are for the most part, small R&D-based organizations with fewe than 20 employees. Those firms are typically undercapitalize and some are living a hand-to-mouth existence. Studies hav repeatedly shown, however, that that is exactly the segment of the R&D community from which the most creative ideas spring and from which future corporate giants grow. It is thus unfortunate that one key agency participating in the SBIR program—The National Institutes of Health—insists on cost-sharing within their SBIR program. The smallest, most creative companies simply cannot afford to share in the costs of the R&D and, indeed, no other agency in the SBIR program requires cost-sharing. Our firm, Bend Research, Inc., has been negatively affected. The cost-sharing provisions of the NIH contracts office take on three forms: first, the small firm winning the award must share in the costs of the R&D. Second, the costs of internal R&D, which all other Government agencies deem an allowable part of overhead, are not allowed by NIH. And, third, other overhead items are similarly unallowed by NIH. Taken in aggregate, these cost-sharing provisions amount to a contribution from the small firm of a minimum of 10%. Now, that may not seem to be repugnant and, indeed, cost-sharing to the extent of 10% of a $300,000 contract may seem quite reasonable to a $100,000,000 per year corporation. However, it is just not workable for many of the smallest U.S. firms.

The source of the problem is a one-sentence provision, Section 202, of the portion of the appropriations law that deals with NIH. (See a page from 98 STAT. 3320, P.L. 98-619, November 8, 1984, attached.) That provision prohibits NIH from paying the full cost of extramural research and, de facto, requires cost-sharing.

The proof that the cost-sharing provision is counterproductive is difficult to assemble. One can, however, find an indirect proof. It comes from a newsletter entitled **InKnowVation**, published by the Innovation Development Institute of Swampscott, Massachusetts. On page 4 of the September 1983 issue, a table is presented that shows the ratio of the number of proposals submitted to each agency under SBIR to the number of awards made. The national average is 13 proposals per award. The ratio is 10 to 1 or higher in each agency except NIH. That is, NIH is receiving fewer awards per budgeted dollar than any other agency. We contend that this is because of the cost-sharing provision of the NIH contracts office. Additional evidence is more tenuous. However, NIH admits that the quality of the proposals they receive from small firms is below their expectations and, here again, we believe that this is because the best of the small, most innovative companies are smart enough to not participate in a cost-sharing program. It is also well known in the research community that NIH has a predisposition against small firms, a situation that we believe has evolved over the years exactly because of the cost-sharing provision and the alienation it has engendered.

We could change all that, and improve America's innovation and productivity in the health-care area, by removing Section 202 from the NIH appropriations law. And that is just what we strongly endorse. It is true that there would initially be a short-term negative impact on the treasury, because NIH would have to pay all the costs of the research and, we believe, that they should also pay a small fee on top of the costs, as all other agencies do. (The fee, incidentally, allows the small firm to just about break even on the R&D contract.) But when the Defense Department buys a tank, it pays the full cost, plus a fee. Why should the purchase of R&D by NIH in areas of national need be any different? The original SBIR legislation allows for reimbursement of full costs and a fee; NIH is the only agency that does not abide by this provision of the law, and they do not because they are hamstrung by Section 202.

Let's remove that provision, stop stifling the small R&D companies that want to participate in the SBIR program at NIH, and create an incentive for the most creative of our nation's resources to introduce innovative new products in the health-care field.

"THE SBIR PROGRAM AND AMERICA'S ECONOMIC FUTURE"

a Statement to the U.S. House of Representatives
Small Business Committee,
Subcommittee on General Oversight and the Economy

by

Dr. Harold K. Lonsdale
President, Bend Research, Inc.
Bend, Oregon 97701-8599

April 25, 1985

There are four topics I would like to address today. First, I'd like to tell you just a bit about our firm, Bend Research, Inc. Second, I will comment on the Small Business Innovation Research (SBIR) program, from our perspective. Then, I will turn to the needs of the entrepreneur for capital, the difficulties we have experienced, and the success we have realized through the SBIR program. Finally, I will address the bigger picture of international competition and the need for leadership and courage here in Washington, D.C.

ABOUT BEND RESEARCH

Our firm was founded in 1975, as an R&D company. Together with our two affiliated companies, we now employ about 70 people. We specialize in membrane science and technology. Membranes can be considered very fine filters, and they are now used in such diverse applications as water desalination, pollution control, artificial kidneys, and slow-release drugs. The worldwide market for membrane-based products is now about one billion dollars annually. The U.S. is clearly the leader in this technology, although Japan has targeted membranes as a high growth area, and they are now outspending the U.S. in R&D by at least three to one.

Let me give you one concrete example of membrane technology. About 2 billion gallons of brackish water and seawater are desalted each day around the world. That's enough water to supply all of Los Angeles, for example. About one-third of that water is now desalted by a membrane process called reverse osmosis, which is less energy-intensive and cheaper overall than the age-old technology, distillation. The U.S. supplies about 70% of the reverse osmosis capacity in the world and our principal market is the water-short Middle East. Our company will soon be marketing a reverse osmosis product.

THE SBIR PROGRAM

I have described the SBIR program as the finest to emerge from the federal government in the history of government-sponsored R&D. It is now widely recognized that the majority of innovative ideas in our country come from small entrepreneurial companies and individual inventors. The SBIR program sets aside a very small portion of the R&D budget of each of the eleven largest R&D-funding agencies of the Government and targets those funds for the support of innovative, product-directed ideas in small companies. Prior to SBIR, those small firms received an extremely small portion of federal R&D funds, and, with the increased costs of progressively more sophisticated R&D, it was difficult for small firms to carry on competitive development programs.

The SBIR program is changing all that. Competition for the awards is keen, as it should be. Only about one proposal in ten is funded, nationwide. The response by our nation's small firms has been overwhelming—more than 10,000 ideas for new products and processes have been submitted already, after only two-plus years of the program. And the National Science Foundation has shown that Government funds have been highly leveraged with private-sector funds, once the ideas have been shown to be technically and economically feasible.

Our firm has been awarded 15 Phase I contracts, 7 of which have now advanced to Phase II. The awards have come from seven agencies: DOD, DOE, Interior, EPA, NASA, NIH, and NSF, so we have developed a fairly good appraisal of the SBIR programs in the various agencies. We feel that the programs at NSF and DOE are probably the best administered. Only at HHS/NIH have we encountered resistance to the program, and that stems almost entirely from certain ill-considered and outdated language in the annual HHS appropriation law.* As with the other winners, it is too soon to judge the magnitude of the success of these developments in our firm, but the early results—described below—are encouraging.

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*I refer here to Section 202 of P.L. 98-619, which should be changed.

Let me add these further thoughts about SBIR:

1. In a sense, the program can be considered "free" to the U.S. Treasury. The funds are simply taken out of existing agency R&D budgets. In addition, the funds are quite small relative to the total U.S. R&D budget: SBIR represents less than 1% of that budget.

2. A hidden benefit of the SBIR program, from our point of view, is that it has required each agency to come up with a list of its objectives. The solicitations amount to a detailed mission statement by each agency which, in many cases, did not previously exist. We think of these solicitation documents as "shopping lists," and those lists lighten our burden of determining, by implication, what the U.S. and world economies want and need.

3. Most major U.S. companies are now watching the SBIR program very closely to look for new products and processes related to their existing businesses. We have found these companies coming to us, sparing us the need to find them, and this "brokering" function of the SBIR program is also important to U.S. economic growth.

4. We already see evidence that SBIR is being judged with a very short time-constant. Modern R&D is a slow, expensive, low-probability business. The odds are so low and the current cost of money is so high that many U.S. chemical companies, for example, have cut back drastically on their R&D programs. (Instead, they are busy with acquisitions and mergers, which contribute nothing to our national economy.) We hear so frequently about the rapid success of a tiny handful of companies like Apple Computer that we tend to overlook the very slow growth of most of our new, hitech products. It now takes about 8 years---and many millions of dollars--to introduce a new drug product in the U.S. While only one SBIR proposal in ten is successful in terms of an R&D contract, probably only one in a hundred will turn out to be a significant commercial success. So I ask the Congress, OMB, and the other powers here in Washington not to judge the SBIR program prematurely, but to be patient and have faith in the American innovation system.

Let me repeat that the SBIR program, in my opinion, is the best to ever come out of the federal R&D procurement process, and I believe it is destined to have the most favorable impact on the U.S. economy.*

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*It is largely the brainchild of Roland Tibbetts of the National Science Foundation. If anyone within earshot knows of a medal for outstanding Government service, please bestow it on him.

CAPITAL NEEDS AND CAPITAL SOURCES

All new hitech products and processes need substantial amounts of capital before they can be successfully developed, manufactured, and marketed. Beginning about two years ago, our firm had completed the R&D on several innovative products that we felt were ready for commercialization. We needed about $3 million for the introduction of our first products. That's when we discovered that, in spite of all the talk about abundant venture capital, the sources of capital available to us were few and the terms were generally repugnant. We explored venture capital sources and found that, while they have abundant capital, they fund only about one deal in one hundred (!) and that they generally want takeover rights if the company in which they are investing falters. Most onerous, they are looking for very high returns on their investment—typically tenfold in 5 years. But what about companies and new products, like our own, that are winners but just don't have that high an expected return on investment? What about the vast middle ground of the American innovation system?

We considered "going public" but decided that our growth rate might not satisfy the expectations of private investors. We've seen too many companies sell their stock at $10 per share and then have it fall to $2 per share to want to join into that game.

In the end, the Bethlehem Steel Co. invested the $3 million in a new company we set up to commercialize some of our products: Consep Membranes, Inc. What attracted Bethlehem were two of our technologies, one of which can be applied to the cleanup and reuse of chromium wastes in the steel industry, and the other to the cleanup of waste streams produced in enhanced oil recovery. Both of these new technologies were developed, in part, through the SBIR program.

We also have established a joint venture with the W.R. Grace Co. in which they have made a sizable investment. As an adjunct to that new business, the Grace Co. is endorsing one of our SBIR Phase II programs, and plans to commercialize the product if the development work continues to be successful.

So the SBIR program has already worked for us, and promises to work even better in the future. Under the program, we are at work on these new technologies:

- a process to extract oxygen from air, that promises to cut the costs of this important chemical and extend its uses.
- a method to clean up heavy metal pollutants from sludges produced in the plating industry.

- a method to recycle washwater, urine, and other waters in the space station.
- a method to clean up stack gases from power plants and thereby eliminate "acid rain."
- a method for extracting drinking water from vehicle exhausts that could be used by the military, for example, in remote areas.

INTERNATIONAL COMPETITION

I appreciate the opportunity to make this testimony in support of the SBIR program. However, I cannot let the following thoughts go unsaid.

For twenty years after World War II, our country had no serious competitors for our new hitech products, and we experienced an era of unparalleled growth and prosperity. Those days are gone, probably forever. The Japanese and others are pressing us hard in international economic competition. The SBIR program is a good one but it is not enough. In addition:

(1) We need to be able to manufacture our newly developed products at a competitive price, because we no longer have the technology and know-how exclusively to ourselves. Because of the Freedom of Information Act, our company's reports on our Government contracts are now probably read first and more seriously in Tsukuba, Japan, than they are in New York or San Francisco*.

(2) We also need to have foreign markets open to our products. Foreign, especially Japanese, protectionism is only part of the problem. The strength of the dollar, caused by our high interest rates, caused in turn by our huge deficits, greatly limits the competitiveness of U.S. products overseas.

Good ideas and good products simply aren't enough anymore, and this is clearly no time for laissez-faire capitalism.

What we need is courage among our elected officials here in Washington. We need to balance the budget by raising taxes, or reducing spending, or both; cut interest rates; and allow the dollar to weaken so that we can increase exports and reduce imports. Americans have lost faith in their elected representatives because those representatives do not have the courage to stop deficit spending and put America's economic house back in order. The American worker, the American businessman, and the American inventor are all doing their jobs well. We ask America's Congressmen to do the same!

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*I consider the FOIA too liberal, and feel that we should take steps to better protect technologies developed with public funds.

General Provisions

Sec. 201. None of the funds appropriated by this title for grants-in-aid of State agencies to cover, in whole or in part, the cost of operation of said agencies, including the salaries and expenses of officers and employees of said agencies, shall be withheld from the said agencies of any State which have established by legislative enactment and have in operation a merit system and classification and compensation plan covering the selection, tenure in office, and compensation of their employees, because of any disapproval of their personnel or the manner of their selection by the agencies of the said States, or the rates of pay of said officers or employees.

Research and development.

Sec. 202. None of the funds provided herein shall be used to pay any recipient of a grant for the conduct of research an amount equal to as much as the entire cost of such research.

Sec. 203. Appropriations in this Act for the Health Resources and Services Administration, the National Institutes of Health, the Centers for Disease Control, the Alcohol, Drug Abuse, and Mental Health Administration, the Office of the Assistant Secretary for Health, the Health Care Financing Administration, and Departmental Management shall be available for expenses for active commissioned officers in the Public Health Service Reserve Corps and for not to exceed two thousand five hundred commissioned officers in the Regular Corps; expenses incident to the dissemination of health information in foreign countries through exhibits and other appropriate means; advances of funds for compensation, travel, and subsistence expenses (or per diem in lieu thereof) for persons coming from abroad to participate in health or scientific activities of the Department pursuant to law; expenses of primary and secondary schooling of dependents in foreign countries, of Public Health Service commissioned officers stationed in foreign countries, at costs for any given area not in excess of those of the Department of Defense for the same area, when it is determined by the Secretary that the schools available in the locality are unable to provide adequately for the education of such dependents, and for the transportation of such dependents, between such schools and their places of residence when the schools are not accessible to such dependents by regular means of transportation; expenses for medical care for civilian and commissioned employees of the Public Health Service and their dependents, assigned abroad on a permanent basis in accordance with such regulations as the Secretary may provide; rental or lease of living quarters (for periods not exceeding five years), and provision of heat, fuel, and light and maintenance, improvement, and repair of such quarters, and advance payments therefor, for civilian officers, and employees of the Public Health Service who are United States citizens and who have a permanent station in a foreign country; purchase, erection, and maintenance of temporary or portable structures; and for the payment of compensation to consultants or individual scientists appointed for limited periods of time pursuant to section 207(f) or section 207(g) of the Public Health Service Act, at rates established by the Assistant Secretary for Health, or the Secretary where such action is required by statute, not to exceed the per diem rate equivalent to the rate for GS-18; for carrying out section 472 of the Public Health Service Act; not to exceed $9,500 for official reception and representation expenses related to any health agency of the Department when specifically approved by the Assistant Secretary for Health.

42 USC 209.

42 USC 289*l*-1.

FY '83 SBIR Proposal Figures

Agency	# Proposals Received	# Awards *(estimated)*	Proposal to Project Rate
DOE	c.1700	100	17:1
EPA	214	10	22:1
NIH	727	100	7:1
DOT	372	8-10	38:1
DoD	c.2900	200[1]	15:1
DOI	105	6	18:1
NRC	172	7-8	22:1
NASA	978	100[2]	10:1
USDA	268	8-10	30:1
NSF	1180	100	12:1
	8516	644	

1. The number of awards to be made by Defense is still not finally settled but is provisionally estimated to be about 200.
2. NASA's SBIR has been established at $5 million permitting increase of the number of projects to be supported from the originally announced 60 to about 100.

STATEMENT OF JEFFREY L. WALTER, EXECUTIVE DIRECTOR, TRICOUNTY ALCOHOL COUNCIL, INC.

Senator BURDICK. Our next witness is Jeffrey Walter, executive director of the Tricounty Alcohol Council, Inc.

Mr. WALTER. My name is Jeffrey Walter, and I am the executive director of the Tricounty Alcohol Council, which operates the Gus Rushford Alcoholism Treatment Center in Middletown, CT.

I am very pleased to have this opportunity to speak with you about the HCFA-Medicare Alcoholism Demonstration Program. My aim today is to help convince you to extend the demonstration period through December 31, 1986, and to assure the completion of the outcome evaluation which is being threatened by early termination.

Ultimately, it is the hope of those of us involved in this important endeavor that permanent Medicare regulations covering alcoholism treatment services in the 50 States will be adopted as a result of the success of the demonstration project.

Let me begin by telling you that the alcoholism treatment programs participating in the demonstration program within the 6 approved States, including the 11 programs within my own State of Connecticut, are acutely aware of the fiscal considerations with respect to the national deficit and the desire to contain Medicare costs which undoubtedly come into play in the decision by OPM and HCFA to curtail the demonstration program.

In coming here today, I am not discouraged by these political and fiscal facts of life. I come armed with the knowledge that the program I am urging you to support is a winner. It is a winner because it successfully addresses the need for providing the most effective treatment to the most disabled of our population, the elderly and the infirm, and does so in the least costly manner available.

The Connecticut experience with respect to the program is one of unqualified success. The program has begun to blossom over the past 18 months after an initial period of development and intensive outreach aimed at acquainting the elderly with the program and making them comfortable enough to take advantage of the services available.

It is an unfortunate fact that this most vulnerable and disabled segment of our population presents the most formidable obstacles in terms of attracting them into treatment. These problems include the natural reluctance of the elderly to participate in an unfamiliar health care system as well as their denial, isolation, and general physical infirmity. Yet, in spite of these obstacles, Connecticut programs have been successful in treating 500 individuals in the relatively short period of 2½ years. Throughout the 6 States, more than 2,500 individuals have received treatment.

Several of the Connecticut programs have learned a most surprising fact from their Medicare-eligible clientele. Many of our clients have stated that they would not come into treatment prior to the project because their Medicare would not cover the cost and they lacked any other means of payment. They simply don't want a handout. They view

Medicare as their health insurance which they have earned; they resent the fact that they were formally denied treatment that others could purchase with Blue Cross and other forms of private insurance.

A second significant phenomenon, and one with an obvious fiscal implication, relates to the number of elderly participants with previous, repeated hospitalizations for alcoholism-related reasons. In our program alone, 76 percent of the Medicare participants have had at least one prior hospitalization within the past 2 years. Most have had multiple hospital admissions for illnesses related to alcoholism as well as alcohol intoxication. Many of these individuals claim that their visit to Rushford Center marked the first time that their alcoholism itself was confronted.

One program reports that a single elderly individual had 20 hospitalizations at a cost to Medicare of approximately $78,000 prior to participation in outpatient services offered through the demonstration program. This individual has not been hospitalized since and has been sober for more than 1 year.

These are not isolated cases of cost savings and salvaged lives. Evidence is coming in from all of the participating States serving as testimony to the fact that community-based treatment in freestanding facilities is a sensible, cost efficient, and successful approach to providing alcoholism services reimbursable through Medicare and Medicaid.

Earlier this year, Illinois completed a study of Medicaid patients which showed a savings of $5 in health care costs for every $1 spent on alcoholism treatment.

Medicare recipients include the most dysfunctional and disabled group of alcoholics. They have lost jobs, families, and every other form of social and emotional support which the rest of us take for granted. They are the elderly looking for a sign that life is worth continuing and that sobriety is worth attaining. They are abused and forgotten people. They use vast amounts of resources. These are people who require comprehensive, quality treatment, but at the same time show the greatest potential for overall cost saving if the progression of the disease is halted.

The truth of the matter is that instead of debating whether the Nation can afford to extend Medicare reimbursement to cover treatment of the disabled elderly alcohol user, we should be asking ourselves the question: Can we afford not to?

I thank you.

PREPARED STATEMENT

Senator BURDICK. Thank you. Your statement along with any other material will be inserted in the record.

[The statement follows:]

STATEMENT OF JEFFREY L. WALTER

My name is Jeffrey Walter and I am Executive Director of Tri-County Alcohol Council which operates the Gus Rushford Alcoholism Treatment Center in Middletown, CT. I am very pleased to have this opportunity to speak to you about the HCFA-Medicare Alcoholism Demonstration Program. My aim today is to help convince you to extend the demonstration period through December 31, 1986 and to assure the completion of the outcome evaluation which is being threatened by early termination. Ultimately, it is the hope of those of us involved in this important endeavor that permanent Medicare regulations covering alcoholism treatment services in the 50 States will be adopted as a result of the Demonstration Project.

Let me begin by telling you that the alcoholism treatment programs participating in the Demonstration Program within the six approved States, including the eleven programs within my own State of Connecticut, are acutely aware of the fiscal considerations with respect to the national deficit and the desire to contain Medicare costs which have come into play in the decision by OPM and HCFA to curtail the Demonstration period. In coming here today, I am not discouraged by these political and fiscal facts of life. I come armed with the knowledge that the program I am urging you to support is a winner! It is a winner because it successfully addresses the need for providing the most effective treatment to the most disabled of our population-- the elderly and infirm-- and does so in the least costly manner available.

The Connecticut experience with respect to this program is one of unqualified success. The program has begun to blossom over the past eighteen months after an initial period of development and intensive outreach aimed at acquainting the elderly with the program and making them comfortable enough to take advantage of the services available. It is an unfortunate fact that the most vulnerable and disabled segment of our population-- the elderly alcohol abuser-- presents the most formidable obstacles in terms of attracting them into treatment. These problems include the natural reluctance of the elderly to participate in an unfamiliar health care system as well as their denial, isolation, and general physical infirmity. Yet, in spite of these obstacles, Connecticut programs have been successful in treating 500 individuals in the relatively short period of 2 1/2 years. Throughout the six States, more than 2,500 individuals have received treatment.

The benefits to the elderly who have participated can be measured statistically (and will be if the evaluation is allowed to continue). I am here, however, to share a few of the more personal results of the program which often get lost in the facts and the figures.

Several of the Connecticut programs have learned a most surprising fact from their Medicare-eligible clientele: many of our clients have expressed the fact that they would not come into treatment prior to the Project because their Medicare would not cover the cost and they lacked any other means of payment. They simply don't want a hand-out. They view Medicare as their health insurance which they have earned; they resent the fact that they were formally denied treatment that others could purchase with Blue Cross or some other form of private insurance.

A second significant phenomenon, and one with an obvious fiscal implication, relates to the number of elderly participants with previous, repeated hospitalizations for alcoholism-related reasons. In our program alone, 76% of the Medicare participants have had at least one prior hospitalization within the past two years. Most have had multiple hospital admissions for illnesses related to alcoholism as well as alcohol intoxication. Many of these individuals claim that their visit to Rushford Center marked the first time that their alcoholism itself was confronted.

Aside from its dubious value in most cases as an effective setting for the treatment of alcoholism, the provision of alcoholism services in a hospital is indeed a tremendously costly venture. One Connecticut program which offers detoxification services and evaluates patients for further treatment reports that, of all Medicare participants served through February, 1985, six (6) had more than 700 prior hospitalizations! At an average cost of $250 per day and an average length of stay of five (5) days, the cost of treating these few individuals in hospital has been at least $875,000, most of which was reimbursed by Medicare. And without effective treatment the patients continue to drink and requires further expensive medical care.

Another program reports that a single elderly individual had 20 hospitalizations at a cost to Medicare of approximately $78,000 prior to participation in outpatient services offered through the Demonstration Program. This individual has not been hospitalized since and has been sober for more than one year.

Our own program takes pride in a number of success stories involving Medicare patients with numerous previous hospitalizations who have gained their sobriety at Rushford Center. Invariably, Medicare patients come to us with serious, chronic health problems such as hypertension, seizure history, liver disease, and pancreatitis which must be addressed in addition to their alcoholism. Our medical and nursing staff attend to these problems; but, it is our ability to get these patients to stop drinking that enables their other health problems to stabilize.

These are not isolated cases of cost savings and salvaged lives. Evidence is coming in from all of the participating States serving testimony to the fact that community-based treatment is the sensible, cost efficient and successful approach to providing alcoholism services reimburseable through Medicare and Medicaid.

We know that alcoholics are extreme health care users and the elderly alcohol abuser represents the largest consumer of health care resources of all. The savings, in terms of reduced health care costs, gained by treating the disease has been well-documented. Earlier this year, Illinois completed a study of Medicaid patients which showed a savings of $5 in health care costs for every dollar spent on alcoholism treatment in community-based facilities. Separate written testimony being submitted by the National Association of State Alcohol and Drug Abuse Directors (NASADAD) indicates a number of other recent studies which detail the cost savings gained by providing alcoholism treatment to Medicare and Medicaid recipients. The outcome evaluation of the HCFA-Medicare Program currently being conducted by Lawrence Johnson is already beginning to generate similar data and is likely to show significant Medicare savings in both the long- and short-runs.

Medicare recipients include the most dysfunctional and disabled group of alcoholics. They have lost jobs, families, and every other form of social and emotional support which the rest of us take for granted. They are the elderly looking for a sign that life is worth continuing and that sobriety is worth attaining. They are abused and forgotten people. They use vast amounts of resources. These are people who require comprehensive, quality treatment, but at the same time show the greatest potential for overall cost savings if the progression of the disease is halted.

The truth of the matter is that, instead of debating whether the nation can afford to extend Medicare reimbursement to cover treatment of the disabled elderly alcohol abuser, we should be asking ourselves the question: can we afford not to?

I thank you for your considerateness and kind attention.

LETTER FROM DONALD J. MCCONNELL

April 25, 1985

The Honorable Lowell Weicker
United States Senator
303 Hart Senate Office Building
Washington, DC 20510

Dear Senator Weicker:

We are pleased that Mr. Jeffrey Walter, Executive Director of Tri-County Alcohol Council of Middletown, Connecticut has the opportunity to provide testimony to the Labor, Health and Human Services Sub-Committee. He represents the eleven Connecticut community based alcohol treatment programs participating in the HCFA Alcoholism Treatment Demonstration for Treating Elderly Alcohol Abusers as well as the participating programs in the other five states.

Connecticut, as one of the six participating states in the HCFA Alcoholism Treatment Demonstration Grant, has been very successful in attracting over 500 elderly alcohol abusers to treatment. Our success is the result of a cooperative effort with the State Department on Aging and our eleven participating programs as well as agencies who work with the aging on a statewide basis. Considerable time and effort has been invested in training program staff in treating the elderly alcohol abuser, in developing creative and effective elderly outreach programs, and in training ancillary agency staff in how to identify, interview, and refer the elderly person to treatment. As a result, we now have an efficient community based treatment system for the elderly alcohol abuser in place along with a responsive referral network.

We are enclosing some historical and statistical information on the HCFA project as supplemental background for the Committee members.

The Lawrence Johnson evaluation data, to date, clearly shows that the community based treatment programs in all six states are effectively attracting and treating the elderly alcohol abusers at a lower cost than in a hospital setting. Unfortunately the evaluation will not be completed until December 1986, which means that any congressional action would take place after that time. With that timeframe, all that has been accomplished to date stands to be lost with the ending of the Demonstration scheduled for September 29, 1985.

For the short term, we respectively request that Legislation be initiated that will authorize HCFA to extend our waiver currently in effect to December 31, 1986. For the long term, however, we strongly urge that both Medicaid and Medicare regulations be modified to allow coverage for the elderly, poor and disabled alcohol abusers treated in community based alcohol treatment programs in all fifty states.

Sincerely,

Donald J. McConnell

Donald J. McConnell
Executive Director

MEDICAID AND MEDICARE COVERAGE OF ALCOHOLISM SERVICES

Alcoholism is the second most costly disease in our society today. In 1974, P.L. 96-180 identified the cost of alcoholism to our society at $43 billion. A 1983 report conducted under the auspices of the Congressional Office of Technology Assessment stated "The economic cost of alcoholism and alcohol abuse... may be as high as $120 billion annually." and "Alcoholics use significantly greater amounts of medical services than do non-alcoholics for a wide range of physical problems caused by or associated with excessive drinking."

The Medical Assistance Programs (Title XVIII & XIX of the Social Security Act) are a vital source of support for old and poor people who are young, old, disabled or blind. These life circumstances have been highly correlated with higher incidence of the disease of alcoholism. However, the Medical Assistance Programs do not support the services for alcoholism most needed by these groups. Eligibility standards discriminate against disabled individuals due to their alcoholism and service definitions fail to include coverage of appropriate, acceptable and more cost-effective services.

The primary factor causing this inadequacy has been the failure to follow through on legislative recognition of the historical development of the alcoholism service system. For many years alcoholism was perceived by the public as a moral defect or self-inflicted condition. Too often this perception led to rationalization of refusal to provide medical or hospital care - even for relatively obvious physical illness and injury. More significantly, this perception allowed the mainstream health care system to renege on its responsibility to treat this disease as it does all others. This, in turn, led to the development of a system of services outside the traditional health care system. This system, developed in part through federal initiative and funding, has developed into a highly effective, alcoholism-specific, and cost-effective system which is largely inaccessible to the Medicaid and Medicare eligible population due to failure of these programs to acknowledge these providers for reimbursement.

I. THE MEDICAID AND MEDICARE PROGRAMS - IGNORE THE NON-TRADITIONAL TREATMENT SYSTEM

Alcoholism Inpatient Services.

The states, voluntary agencies and business entities have created a network of alcoholism-specific inpatient and residential facilities which have been recognized as cost-effective by the private insurance industry.

Inpatient services, whether for detoxification or rehabilitation, are eligible for Medicaid and Medicare reimbursement only as inpatient hospital services in general hospitals or in institutions for mental diseases. In such settings, generally applicable hospital requirements are responsible for unnecessarily high costs for alcoholism services. In other states, alcoholism services are operated in hospital settings on a limited basis, but at higher than necessary costs. Thus, while Medicaid and Medicare will pay for these hospital-based services where they exist, they are only minimally available to alcoholics in need of this level of treatment.

While freestanding alcoholism rehabilitation programs can exist in and be eligible for Medicaid and Medicare as institutions for mental diseases, Medicare only pays for the care of persons over age 65 in these facilities. Therefore, most alcoholics who can benefit from such services are not eligible for these services. Furthermore, for a facility to qualify as a provider, it must conform with Medicare conditions of participation for psychiatric hospitals or federal standards for skilled nursing facilities which require many features which are not necessary or appropriate for alcoholism services. As a result, virtually all existing freestanding alcoholism inpatient detoxification and rehabilitation programs which provide appropriate cost-effective treatment are ineligible to participate as Medicaid and Medicare providers.

Outpatient Services

The vast majority of alcoholics can recover from their diseases with specialized outpatient services which provide alcohol education, alcoholism counseling, orientation and linkage to self-help groups, and referral for medical or psychiatric services when necessary for specific concomitants of alcoholism. The Medicaid and Medicare programs do cover these services when provided by a hospital outpatient department but few hospitals provide these services. They may also be Medicaid eligible as "clinic services" if they are provided by or under the direction of a physician. However, many states do not include clinic services in their Medicaid plans and many others limit "clinic service" payments to traditional physical health services provided by a physician or incidental to physician services.

Halfway Houses and Other Residential Services

Many alcoholics require a period of time in a mutually supportive group of recovering alcoholics to support maintenance of abstinence while they relearn to cope with the environment and community without alcohol. They may also be receiving outpatient counseling and be involved in self-help groups. While these facilities serve a purpose very similar to nursing homes for post-hospital care of physically ill persons, there is no Medicaid category which would allow them to be reimbursed.

II. FEDERAL ALCOHOLISM INITIATIVES - THE BROKEN PROMISE

As far back as 1968, the Congress stated the need for all federal programs to be brought to bear on the problem of alcoholism. The Alcoholic Rehabilitation Act of 1968 (P.L. 90-574) stated in part:

> "The Congress further declares that, in addition to the funds provided for under this part, other federal legislation providing for Federal or federally assisted research, prevention, treatment or rehabilitation programs in the fields of health should be utilized to help eradicate alcoholism as a major health problem."

This congressional intent was restated in 1974 (P.L. 93-282) when Congress declared; "that, in addition to the programs under the Comprehensive Alcohol Abuse and Alcoholism Prevention Treatment and Rehabilitation Act of 1970, programs under other Federal laws which provide Federal or federally assisted research, prevention, treatment or rehabilitation in the fields of health and social services should be appropriately utilized to help eradicate alcohol abuse and alcoholism as a major problem."

Seventeen years later, the federal government's primary assistance program for the health care costs of the aged, disabled and poor still cannot be utilized for the appropriate treatment of alcoholism.

III. MEDICAID AND MEDICARE COVERAGE OF ALCOHOLISM SERVICES - CAN WE AFFORD NOT TO?

No citizen of these United States can claim to be unaware of our federal government's financial problems. The federal deficit is many times larger than even the largest state's budgets - larger than our largest corporations - larger even than the cost of alcoholism to our society. Understandably, the orientation is to reducing expenditures and ending programs. However, when it comes to alcoholism services, such actions will result in increased social and health expenditures, longer dependence on public benefits and increased drains on other programs. When it comes to alcoholism can we afford not to provide treatment?

A variety of studies of alcoholism treatment costs and effects dramatically document the cost reduction accruing from the treatment of alcoholism.

1. The Illinois H.C.F.A. demonstration project contracted with Sangamon State University to study the effect of alcoholism treatment on the Medicaid costs of 176 patients treated in their demonstration. This study showed a "net savings" of $151,000 to the state from the provision of alcoholism treatment during the year in which treatment was provided over a 27 month period, including a 5 month pre-treatment baseline and a 9 month post treatment follow up, a $500,000 net savings was realized. This represents a $5 savings in general health care costs for every dollar expended on alcoholism treatment.

2. The Chemical Abuse Treatment Outcome Registry (CATOR), a cooperative research organization in Minnesota, showed a substantial reduction in eligibility for welfare benefits during the year following treatment. 163 persons or 165 of a studied sample of persons in alcoholism treatment were dependent on welfare at the point of entry into treatment. By 6 months after treatment this number had declined by 44% to 92 persons, and after one year following treatment only 61 persons remained on welfare.

3. The Monroe County (New York) Department of Social Services did a one-year follow-up study of part of their public assistance caseload. Of this group, 34% had alcohol and drug problems for which they were receiving treatment. One year later, 34% of this group was completely off public assistance while only 28% of the remaining caseloads was off welfare.

4. New York State's HCFA demonstration project examined a sample of 100 patients treated in participating inpatient treatment facilities and found that in the three months following treatment their average monthly Medicaid claims had declined to $232 compared to an average for all Medicaid eligibiles of $381.29 per month.

5. A New Jersey study of the first 100 patients treated in that state's H.C.F.A. demonstration showed an average decrease in Medicaid utilization of $259 during the first year following alcoholism treatment. By comparison, the average cost of all New Jersey Medicaid recipients increased $114 during the same year.

A major savings which results from the treatment of alcoholism is reduced rates of acute hospital utilization. This has shown a number of private sector studies and should also be available to Medicaid and Medicare. Major savings will result. While comparable analyses of Medicaid and Medicare eligibile populations have not been done, the consistency of private sector findings supports the expectation of similar savings to the Medicaid and Medicare program. Some examples:

1. Comprehensive Health Service a Detroit HMO, found that the number of hospital days for a group of subscribers receiving alcoholism treatment declined from 10.23 days per person in the year prior to treatment, to 2.7 days in the year following treatment.

2. The Oklahoma Department of Mental Health studied the hospital records one year before and after alcoholism treatment and found a decline of 54% in the cost of hospitalization.

3. The National Maritime Union's Pension and Welfare Fund studied hospitalization of alcoholics receiving alcoholism treatment for two years prior to and following treatment. They found a 43% decline in hospital days from 14 per person per year before treatment to 8 per person per year after treatment.

4. The CATOR study found reductions in hospitalization following treatment ranging from 43% to 87% depending on the purpose of the hospitalization.

5. A Navy study of 161 enlisted men treated for alcoholism in a Navy alcoholic rehabilitation center showed an average of 26 days of hospitalization per patient in the two years prior to alcoholism treatment and an average of 13.9 days in the two years following treatment.

6. A later CATOR study of 655 persons treated showed a decrease in annual hospital days in the year before and after treatment from 5.5 days to 2.3 days, respectively.

It is true that these savings can result from treatment in existing Medicaid and Medicare eligible programs - if they are available. However, they are not generally available. Furthermore, the Medicaid and Medicare programs will not achieve maximum savings if traditional providers are used since they are far more expensive than alcoholism specific providers. As only one example, the N.Y.S. H.C.F.A. demonstration project analyzed the cost of providing inpatient rehabilitation services to Medicaid clients in the demonstration. These services actually cost $2.3 million. The analysis showed that if they had been provided by available and accessible general hospitals, these services would have cost $11.6 million.

IV. TO CUT THE MEDICAID AND MEDICARE BUDGETS AMEND TITLE XVIII AND XIX TO INCLUDE ALCOHOLISM SPECIFIC FACILITIES.

The simplest approach for Medicaid is to change the definition of "institutions for mental diseases" to exclude facilities limited to the treatment of alcoholism and drug abuse.

A more comprehensive approach which would result in greater short-term and long-term savings to the federal budget would require: Adding "alcoholism facility services (whether inpatient, outpatient or residential) which meet standards established by the Secretary.": as a service required to be included in state medical assistance plans and making necessary modifications of the Medicare regulations.

STATEMENT OF JOSEPH SULLIVAN, EXECUTIVE DIRECTOR, MIDWESTERN CONNECTICUT COUNCIL ON ALCOHOLISM

ACCOMPANIED BY AUGUST ERB, HARTFORD HALFWAY HOUSE

Senator BURDICK. Our next witness will be Joseph Sullivan, executive director, Midwestern Connecticut Council on Alcoholism.

Welcome to the committee, Mr. Sullivan.

Mr. SULLIVAN. Good morning. I am Joe Sullivan, and I am executive director of the Midwestern Connecticut Council on Alcoholism in Danberry, CT. I am very grateful to be here today.

I want to share with you some of the implementation of the program that Jeff was just talking about on a very concrete level.

The demonstration was partially designed to assess the impact of alcoholism treatment on the increased utilization of health services by older alcoholics. As a case example, I can site a 63-year-old woman who was hospitalized for various gastrointestinal problems on three separate occasions in the year prior to her participation in the demonstration. The total number of days in the hospital for that year was 39 at average cost of $250 a day, it cost the Medicare system $9,750. For 28 days in our freestanding alcohol treatment facility, at a cost of $86 a day, or $2,400, her alcoholism was treated. In the year following her treatment, she was not hospitalized at all. The cost benefit should be obvious.

During the period of July 1, 1982, through the present, a period of almost 3 years, 49 Medicare covered patients went through our inpatient program. Of those, 34 are sober today, 29 have been sober since the program completion, 5 had a relapsed and sobered up again, 14 are either drinking again or we have lost track of them and 1 has died. This is a recovery rate of 70 percent.

If the demonstration project ends as planned, we will have to start referring our elderly alcoholics to one of two or three hospital-based programs at a cost roughly three times that of ours. The full cost of care for rehabilitation will rise from roughly $2,400 in our program to about $7,000 in a hospital program. Somehow, during times of purported fiscal responsibility, the merit of that escapes me.

The Office of Management and Budget has canceled the outcome study and HCFA claims that enough data is already available to determine the cost benefit of Medicare and Medicaid reimbursement of freestanding facilities. Presumably they intend to extend coverage if the outcome so indicates.

My suggestion today is to continue the demonstration allowing for Medicare reimbursement of freestanding facilities. At worst, the cost savings of freestanding over hospital based will result in less money being spent while conclusions are being drawn. At best, a network of existing services will remain intact and continue providing services should the outcome results warrant.

I thank you for your interest. I would like to turn the rest of our time over to Mr. Gus Erb.

Mr. ERB. I am Gus Erb, a resident of Wilton, CT. I can substantiate what has just been said. I have seen it. I went through the program. I had tried it on a number of occasions before, but the unit that I went to was excellent.

They had tapes and movies besides having meetings, it seemed like it was every 20 minutes, but it was three or four a day, and you would end up at a regular AA meeting in the evening. This sort of thing is difficult to come by at these days' prices. I am fortunate that I was able to find the program when I did.

Actually, I wouldn't be here otherwise, let me put it that way. My condition was deteriorating. Alcoholism is a disease. If you don't recover from it, you die.

Thank you very much.

PREPARED STATEMENT

Senator BURDICK. Thank you. We will place your statement in the record.

[The statement follows:]

STATEMENT OF JOSEPH SULLIVAN

I am here to ask for your consideration and support for mandating the Health Care Finance Administration's continuation of the demonstration that it is conducting jointly with the National Institute on Alcohol Abuse and Alcoholism. As you may be aware, that demonstration is examining the cost benefit of Medicare and Medicaid coverage to freestanding alcoholism facilities. I thought that you would be interested in the implementation of this on a local level.

The demonstration was partially designed to assess the impact of alcoholism treatment on the increased utilization of health services by older alcoholics. As a case example, I can site a 63-year-old woman who was hospitalized for various gastrointestinal problems on three separate occasions in the year prior to her participation in the demonstration. The total number of days in the hopsital in that year was 39. At an average estimated cost of $250 per day, her care cost Medicare $9,750. She was treated for her alcoholism at our freestanding rehabilitation facility for 28 days at a cost of $86 per day for a total of $2,408. In the year following her treatment, she wasn't hospitalized at all. The cost benefit should be obvious.

During the period from July 1, 1982, through the present, a period of almost 3 years, 49 Medicare covered patients went through our inpatient program. Of those, 34 are sober today (29 have been sober since program completion and 5 had a relapse and sobered up again), 14 are either drinking again or we have lost track of them and 1 has died. This is a recovery rate of almost 70 percent.

If the demonstration project ends as planned, we will have to start referring our elderly alcoholics to one of two or three hospital based programs at a cost roughly three times that of ours. The full cost of care for rehab will rise from roughly $2,400 in our program to about $7,000 in a hospital program. Somehow, during times of purported fiscal responsibility, the merit of that escapes me.

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My suggestion today is to continue the demonstration allowing for Medicare reimbursement of freestanding facilities. At worst, the cost savings of freestanding over hospital based, will result in less money being spent while conclusions are being drawn. At best, a network of existing services will remain in tact and continue providing services should the outcome results warrant.

I thank you for your interest. I will be happy to answer any questions or supply additional information.

STATEMENT OF DONALD J. McCONNELL, EXECUTIVE DIRECTOR, CONNECTICUT ALCOHOL AND DRUG ABUSE COMMISSION

Senator BURDICK. Our next witness is Donald J. McConnell, executive director, Connecticut Alcohol and Drug Abuse Commission.

Mr. MCCONNELL. My name is Donald J. McConnell, and I am the executive director and commissioner of the Connecticut Alcohol and Drug Abuse Commission, the single State agency for drug and alcohol abuse in the State of Connecticut.

I am appearing before you today, however, in my capacity as immediate past president of the National Association of State Alcohol and Drug Abuse Directors, otherwise known as NASADAD. I am pleased to have this opportunity to present a statement before the subcommittee at this hearing.

I would like to talk about the President's 1986 budget request for the programs administered by the Alcohol, Drug Abuse, and Mental Health Administration, known as ADAMHA.

The chairman and the members of your subcommittee, Senator, are already familiar with the range, complexity, and seriousness of the problems which result from alcohol and drug abuse. These problems impact on every sector of our society, transcending socioeconomic levels, age, race, and sex.

A recent study from the Institute of Medicine shows that the overall yearly direct and indirect expenses for mental health, alcohol, and drugs is estimated at $185 billion in the country.

I would like to focus this testimony primarily on the alcohol, drug, and mental health block grant. In 1981, nationally, we had $638 million. We were cut 23 percent, and we are now down to a Presidential current status quo recommendation of $490 million. That is quite a drop from $638 million.

The current amount we need this year appropriated in order to remain status quo in our State is $515 million. You have authorized $545 million. We are asking that that $545 million that is authorized be appropriated. We are still not up, therefore, to the $638 million where we left off in 1981.

Although the resources are going down, and support is going down from the Federal Government, the demand in our State is up. We have done a State survey, and the needs are very explicit. You heard just now the testimony from the State of Connecticut with regard to the Medicare/HCFA demonstration project, and there are six States involved in that. Governor O'Neill from Connecticut has asked that these six States be extended, that many of the elderly they are treating will not be treated unless the money comes from the Federal Government. We would like this successful project not only extended in the six States immediately, but expanded to the 50 States as soon as possible.

We are still struggling with the impact of the 5-percent set-aside in our block grant for women services. There was no needs assessment done on this, and States, we believe, should be left to determine their own priorities. In Connecticut, for instance, we had to close the women's facility down that we opened up because of lack of utilization.

We have other priorities, and women are among them, but we have a need for services to minorities and youth very badly in Connecticut. So we are asking, if you want to continue the set-aside, then change the word set-aside, and give us a new appropriation of $25 million to take care of the services for the set-aside. It caused quite a lot of disruption in the States, this set-aside policy.

We ask also that you support the budget for NIDA and NIAAA, in research, $79.6 million for NIDA and $68.7 million for NIAAA; for research training in NIDA, $1.6 million, and $2.7 million for research training in NIAAA.

Finally, I would like to state that we need clinical training put back in our budget. It was cut from the budget but human resource development in the drug and alcohol field is important. Our people work hard, they work long, and they burn out. We need to replace these people.

We are asking for a minimum of $1 million in the NIDA budget, and a minimum of $1 million in the NIAAA budget for clinical training which can be extended to the States.

It would be nice if we could replace what was cut from the States before and get about $60,000 per State for a national network of State training coordinators. This would cost in total about $3 million.

Thank you very much for your time. It is a pleasure being here.

PREPARED STATEMENT

Senator Burdick. Thank you for your testimony. It will be inserted in the record in its entirety.

[The statement follows:]

STATEMENT OF DONALD J. MCCONNELL

My name is Donald J. McConnell and I am Executive Director of the Connecticut Alcohol and Drug Abuse Commission. I am appearing before you today in my capacity as Immediate Past President of the National Association of State Alcohol and Drug Abuse Directors (NASADAD) and am pleased to have this opportunity to present a statement for the Subcommittee hearing record on the President's FY 1986 budget request for the programs administered by the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA).

The Chairman and Members of the Subcommittee are already familiar with the range, complexity and seriousness of the problems which result from alcohol and drug abuse. These problems impact on every sector of our society, transcending socioeconomic levels, race, age and sex. Following is a quote from the October, 1984 Institute of Medicine (IOM) Report, entitled Research on Mental Illness and Addictive Disorders: Progress and Prospects, which documents the significant, negative consequences of these disorders:

> "Mental disorders and addictive states, especially when severe or chronic, cause personal, economic, and social upheaval both for afflicted individuals and for those close to them. In the United States alone, conservative estimates suggest that mental disorders and addictions directly afflict 30 to 45 million people and cost $20 billion annually in direct health-care expenditures. They contribute especially to morbidity, using such measures as utilization of long-term care and Social Security Disability, and the indirect costs to society, including lost productivity, social services, and crime control. Overall, yearly direct and indirect expenses total an estimated $185 billion."

The IOM report also concludes that "economic consequences of the disorders under the ADAMHA purview are comparable to those for heart disease and cancer." Yet, Federal support for these disorders is clearly inadequate. For example, in the case of alcohol research, for every research dollar spent on alcoholism and alcohol abuse in 1981, $35 was spent on cancer, $15 was spent on heart and vascular disease; and $4 was spent on respiratory disease.

As with alcohol research, Federal support for alcohol and drug treatment and prevention services is grossly inadequate. A report recently released by the Research Triangle Institute estimated that the economic costs to society of alcohol and drug abuse were $176.4 billion in 1983. The costs per capita were also estimated and found to be $499 per person for alcohol abuse and $255 per person for drug abuse. During that same time period, Federal support for alcohol and drug treatment and prevention services, as provided to the States via the ADMS Block Grant, was only $238 million - down almost $100 million from a high of $332 million in FY 1980. The FY 1985 or current funding level for the alcohol and drug portion of the ADMS Block Grant is $248.7 million, an almost 40 percent reduction from FY 1980 levels when the total is adjusted for inflation. It appears that, in this case, Federal spending policies have been pennywise and pound foolish.

Even with diminishing Federal support, most States have been able to maintain their services system due to an overlap in Federal funding which accompanied the ADMS Block Grant when it was authorized in 1981, and to increases in State appropriations. While for the most part the services system has been maintained, it has not grown significantly in the past five years to meet the new demands being placed on it from the general public, the ever-increasing numbers of driving while intoxicated offenders, the growing numbers of individuals dependent on cocaine and other drugs and from the newly developing homeless population.

A FY 1984 survey of the States conducted annually by the National Association in cooperation with the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) documents serious unmet service needs. In the FY 1984 survey, which was conducted last November, ninety-eight percent of the State respondents indicated that an unmet need for treatment services exists within their State. With regard to prevention services, 96 percent of the respondents reported unmet prevention service needs. Narrative responses describing specific unmet needs were also provided by 39 States plus Puerto Rico. I have provided a copy of the narrative responses as Attachment A. In general, the unmet needs identified by the respondents in their narratives include a need for increased resources and expanded services to youth, women, Hispanics, Native Americans and offenders within the criminal justice system. Also, many States described the enormous demands being placed on the treatment system as a result of the increased enforcement of driving while intoxicated statutes.

It should be noted that States have clearly assumed a major role in the provision of resources for alcohol and drug abuse treatment and prevention services. While State monies represent close to 50 percent of the total funds allocated for alcohol and drug prevention and treatment programs, Federal sources provide 20 percent of the resources and county/local sources another 10 percent. It is apparent, however, that the alcohol and drug services system relies on the mutual support of Federal, State and local government grants.

While most other traditional and non-stigmatized types of health-care services are typically eligible for reimbursement by private and public health insurance programs, it is the exception rather than the rule for alcohol and drug abuse services to be covered by many of these third-party programs. Private third-party payors are beginning to recognize the wisdom of providing appropriate alcohol and drug abuse benefits and many large employers are insisting that appropriate alcohol and drug abuse benefits be included in the health insurance provided for their employees. These employers recognize the cost savings aspect of alcohol and drug abuse treatment since it enhances productivity and reduces other health care utilization. Unfortunately, too many of these available benefits are limited to hospitalization which generates excessive costs and often denies more appropriate and effective treatment. The Federal government's public health insurance programs are the wost offenders of excessive spending for hospitalization and are lagging far behind the private sector in providing more cost effective benefits for alcohol and drug abuse treatment.

A demonstration project currently being conducted in six States by the Health Care Financing Administration (HCFA) has been examining the feasibility and cost-effectiveness of extending Medicare and Medicaid reimbursement for non-hospital alcohol treatment services. Results from the States participating in the study, of which Connecticut is one, have documented the effectiveness and cost-savings of this reimbursement policy. For example, the State of Illinois found that the provision of non-hospital alcoholism treatment services to 176 Medicaid clients resulted in substantial "net savings" to the State. Savings were defined as the difference between the estimate of what health care costs would have been without treatment for alcoholism and what health care costs actually were. Net savings were defined as savings less costs of providing alcoholism treatment. Net savings to the State of Illinois for these 176 Medicaid clients were estimated to be approximately $151,000 in FY 1983 and in excess of one-half million dollars for the period of July, 1983 - March, 1984. I strongly recommend that the Subcommittee members support an extension of non-hospital alcohol and drug treatment services to Medicare and Medicaid clients in those States currently involved in the demonstration project and expand these services to the other States as soon as possible. This project will result in significant, overall cost savings to the Federal government.

The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 required the Secretary of the Department of Health, Education, and Welfare to "develop and conduct comprehensive health, education, training, research and planning programs for the prevention and treatment of alcohol abuse and alcoholism and for the rehabilitation of alcohol abusers and alcoholics". Yet, 15 years later, the Federal Government has yet to provide reimbursement for these services in a cost-effective and appropriate manner through the Federal Government's primary health care programs for the poor, aged and disabled. Your support for and recognition of these services would end this costly discrimination against persons who are dependent on alcohol and other drugs.

If the Medicare and Medicaid programs provided appropriate services, the ADMS Block Grant could concentrate on providing services for those who have inadequate health insurance and who are not eligible for Medicaid or Medicare. As it now stands, ADMS Block Grant funds are being seriously depleted by serving Medicare and Medicaid -eligible recipients and cannot as a result meet other services needs. Even if the ADMS Block Grant appropriation was equal to the full authorization level for FY 1986 - $545 million - the total amount of funds would continue to be far inadequate until we correct these deficiences in the Medicare and Medicaid programs.

The Administration has requested only $490 million for the ADMS Block Grant in FY 1986, the same amount appropriated by the Congress in FY 1985. Because of the allocation formula change in the ADMS Block Grant authority enacted by the Alcohol, Drug Abuse and Mental Health Amendments of 1984, P.L. 98-509, only one-half of the States received an increase in their ADMS Block Grant in FY 1985. Connecticut was not one of the States that benefitted from the allocation formula change. If the Congress agrees to the Administration's budget request, Connecticut and the other States which did not receive an increase will again be the losers. It should also be pointed out that in addition to the allocation formula change, P.L. 98-509 requires the States to spend an amount equal to five percent of the TOTAL ADMS Block Grant on the expansion of alcohol and drug services to women, regardless of whether the State received an increase in the award for FY 1985. These new conditions are causing hardships for the existing services systems in numerous States.

I encourage the Members of the Subcommittee to appropriate the full amount authorized for the ADMS Block Grant in FY 1986 - $545 million. Since the alcohol and drug portion of the total ADMS Block Grant appropriation is equal to 50.76 percent of the amount, alcohol and drug abuse services would receive $276.6 million of the appropriation. This is still a far cry from the 1980 appropriation of $332 million, but it would provide some welcome relief to the services system and assist in meeting the ever-increasing demand for services.

NIAAA and NIDA support research directed at improving our understanding of the causes and consequences of alcohol and drug abuse and the development of improved prevention and treatment techniques. The October, 1984 Institute of Medicine (IOM) Report on the progress and prospects of the ADAMHA research programs highlights exciting research being undertaken by both NIAAA and NIDA and notes that the level and range of opportunities for productive alcohol and drug research have never been greater.

The landmark IOM report calls for an annual commitment to alcohol and drug research of $100 million per Institute for research and research training and yet the President's budget request for the NIAAA program is only $54.1 million ($52.6 million for research and $1.5 million for research training). The NIDA programs have traditionally fared slightly better than the NIAAA research activities, but even with a slightly larger budget the Administration's FY 1986 budget request of $70.1 million ($68.6 million for research and $1.5 million for research training) is grossly inadequate in comparison to funding for other health research and in view of the enormous cost to the nation of these problems.

This year NASADAD has joined 26 other national alcohol, drug abuse and mental health associations in the development of a unified budget request for the ADAMHA programs (see Attachment B). This document was developed in response to our deep concern over the inadequacy of the President's proposed FY 1986 budget for ADAMHA. Included within this document are detailed budget justifications for significant increases in the various NIAAA and NIDA programs. For NIAAA research and research training programs we have recommended an appropriation of $71.4 million ($68.7 million for research and $2.7 million for research training). The NIDA research and research training programs are proposed at $79.6 million and $1.6 million, respectively.

I recognize that the current budget deficits may not permit the kind of increases that would provide the optimum level of research support, but I urge you to consider, at a minimum, an appropriation for NIAAA and NIDA that is equal to the authorized level of support for FY 1986. These amounts would represent a true current services level based on the FY 1985 appropriation. The FY 1986 authorization level is $61.0 million for NIAAA research and $74.0 for NIDA research. The amount needed to maintain the Institutes' research training programs at the current services level is $1.6 million per Institute.

Last year, Congress authorized the restoration of the NIAAA and NIDA clinical training programs that were dismantled in 1982. I encourage you to appropriate, at a minimum, $1.0 million per Institute for these programs in FY 1986. The States and the private sector have not been able to assume funding for the national training activities previously supported by Federal funds and require assistance. It should be remembered that the alcohol and drug abuse field have more recovering people, minorities and non-degreed staff than many of the traditional health fields and we need support for the training of our core personnel.

The States are also extremely concerned over the proposed reductions in staff at the Institutes for FY 1985 and 1986 and the President's proposed reductions in the NIAAA and NIDA direct operations budget. These reductions will significantly hamper, if not eliminate, the Institutes' prevention, technology transfer, technical assistance and research information dissemination efforts. I therefore request, at a minimum, staffing levels of 220 FTEs for NIAAA and 283 FTEs for NIDA. The amount needed to maintain current services within the direct operations function of the Institutes in FY 1986 is $12.6 million and $16.2 million, for NIAAA and NIDA, respectively.

In closing, I would like to reinforce my earlier comments that alcohol and drug abuse take an enormous toll on our society, both in economic and human terms. The current treatment system is struggling to survive, operating under a 40% reduction in Federal support at a time that increased public awareness of alcohol and drug abuse problems is placing ever greater demands on the treatment and prevention services network. It is time that the Federal government's Medicare and Medicaid programs recognized the value, necessity and cost-savings of alcohol and drug treatment on health care costs and provided adequate reimbursement for services in less costly, non-hospital settings.

In addition, the two Federal Institutes designated with the responsibility to provide us with new knowledge and information on the extent, consequences, treatment and prevention of these problems are operating under significant strain. According to the experts, the opportunities for research in these areas have never been greater. However, the Institutes, as the services systems, are struggling to maintain current services levels and to ward off reductions in staff and prevention and research dissemination activities. The coalition of 27 organizations which developed the unified budget recommendations for ADAMHA programs in FY 1986 have outlined a reasonable plan for growth in the Federal alcohol, drug abuse and mental health programs. I ask you to please review these proposals. If you find that, due to budgetary constraints, you are unable to support our requests for growth, I encourage you to at least provide appropriations that would allow our services and research programs to be maintained in FY 1986 at their current services levels and provide adequate continuation and staffing costs.

Thank you for the opportunity to appear before you today.

ATTACHMENT A

STATE NARRATIVE REPORTS ON UNMET NEEDS IN TREATMENT AND PREVENTION DURING FISCAL YEAR 1984

ALABAMA:

The Department is currently developing a substance abuse service need methodology. Preliminary efforts indicate unmet need in all categories of service.

ALASKA:

To satisfy the unmet need for services the State legislature awarded $600,000 to the Department of Corrections (who turned the money over to the State alcohol and drug authority) to provide alcohol and drug treatment services within the correctional facilities. In addition, the legislature made a supplemental award of $800,000 to fund six (6) rural youth prevention projects and a region wide award of $100,000 to fund a detox center that would also provide emergency care in an isolated area of the State.

ARIZONA (DRUG):

Conservative estimates of need for publicly funded drug abuse treatment services suggest Arizona is only reaching approximately ten percent of those who need assistance. This effect results from insufficient available funds.

CALIFORNIA:

The following statement of prevention needs have been identified by the California State Legislature, State Drug Advisory Board, County Drug Program Administrators Association, Directors Task Force on Drug Abuse Prevention and the Department of Alcohol and Drug Programs and will not be met during the 1984-85 fiscal year.

- Development of standards for drug abuse prevention services.
- Development of statewide prevention management information system.
- Coordination of youth prevention issues with other agencies.
- Increasing services to high risk populations.
- Credentialing of service providers.
- Development of guidelines for service distribution (e.g. ratio of public funds between primary prevention and early intervention).
- Obtaining of prevention related research.

In addition, the State of California has identified unmet alcohol service needs for specific populations, and for prevention.

- A determination of unmet needs among American Indians is confounded by the lack of an accurate census of that population. In a survey conducted in 1983 by the Urban Indian Health Council, most respondents either perceived a need for services (38 percent) or were uncertain about the need (42 percent).

- While all services are available on a non-discriminatory basis, some services have been tailored specifically to meet the needs of the Black population. A recent survey identified the need for more training and technical assistance to those specialized programs. Similarly, a recent study of programs indicates that both programs for the general population and programs targeting Hispanic persons are in need of technical assistance and training, to assess local needs and deliver appropriate services to Hispanics.

COLORADO:

Based upon 20 percent of the problem drinking population the following information describes the unmet need in alcohol treatment:

- non-hospital detoxification, 18.7% gap
- outpatient counseling, 22.7% gap
- halfway house services, 68.5% gap
- hospital intensive residential treatment, 46% gap
- community intensive residential treatment, 39% gap

For drug treatment the State agency uses the percentage of met needs:

- acute residential care, 0%
- short term residential treatment 8-11%
- long term residential treatment, 27.3-55%
- psychiatric hospital intensive residential, 30-44%
- day care, 21-44%
- transitional care (halfway house) 4.6-6.8%
- drug free outpatient, 30-34%
- outpatient methadone treatment, possibility that amount of available treatment is adequate (it is either half or all).

CONNECTICUT:

Treatment needs identified include:

- A new long term care facility which will reduce occurrences of problem drinking and repeated admissions to costly medical services by the public intoxicant population by providing more appropriate and less costly community alternatives;
- A new alcohol halfway house for the Hartford area which will allow a continuum of care to the community, provide greater access to treatment and continuity of the family life and employment;
- A Hispanic residential program geared to the Hispanic alcoholic - no appropriate program (with respect to cultural/linguistic focus) currently exists;
- Expansion of methadone slots to alleviate current waiting lists;

- Replication of a successful prevention program for 4th - 6th grade;
- Expansion of the research, evaluation and program development responsibilities to support State level decision making and policy development;
- Replication of 2 basic life skills programs for low income women and children;
- Expand teacher training in the substance abuse field and peer counseling program training for adults and students; and
- Implement two case management projects geared to the public intoxicant/chronic recidivist population in urban areas.

DELAWARE:

Delaware concentrated on one major unmet need in Federal Fiscal Year 1984: Residential Rehabilitation for Adult Drug Abusers. Since 1982 Delaware has been without an in-state provider of drug residential services. Support for the development of such services was evident in FY 1984 and community as well as legislative activity was much in evidence. Although the need was not satisfied during the year much progress was made.

HAWAII:

In the area of prevention services, the State of Hawaii has an unmet need for a variety of services including primary prevention, non-crisis intervention, crisis counseling/ referral and temporary community shelter. A significant unmet need also exists for the following treatment services: community treatment (day care, partial care, community outpatient, detoxification), aftercare/follow-up community support, supportive residential living (semi-independent/independent, domiciliary care), rehabilitative care and residential medical and social detoxification services.

IDAHO:

In FY 85 the State Substance Abuse Program will receive $132,051 more Block Grant monies than originally budgeted. However, 20% of this amount will be necessary to fund prevention services, under the terms of the Block Grant. This leaves $105,600 which can be used to provide for treatment services during FY 85. The current FY 85 contracts are $109,018 short of their FY 84 levels. If we use the $105,600, plus another $4,000 of budgeted but non-contracted monies in the trustee and benefit category, we will be able to return the FY 85 contract levels to the FY 84 levels.

The FY 86 budget would then be comprised of approximately $16,582, which would be derived from the unexpected FY 85 Block Grant amount and be above the FY 84 contracts base - $1,491,000 of dedicated AITA account money, $5,000 of receipts, and $596,808 from the FY 86 Block Grant for treatment. This would leave a total FY 86 budget for the treatment trustee and benefit category of $2,109,390. The FY 84 contract base is $2,419,043. This results in a deficit of FY 86 levels to FY 84 contract levels of $309,653. A rounded-off request for $300,000 of General Fund monies would be appropriate to return contract FY 86 levels to the levels which existed in FY 84.

INDIANA:

The performance audit report to the Indiana Legislature's Sunset Committee noted that the total level of services for alcohol and other drug abusers was woefully inadequate. The report concluded that "...the severity of the need and the gaps in services point out the desirability of expanding service capabilities. Furthermore, the widespread social and economic consequences of drug and alcohol abuse in terms of decreased worker productivity, increased health and health insurance costs, increased incidence of divorce, child abuse, suicide, mental illness, traffic injuries and death, crime and countless other negative effects are difficult to overstate. Finally, it appears difficult to justify the relatively small expenditures on addiction services relative to the much larger amount spent on mental illness and services to the developmentally disabled." The report also cited the absence of a unified system for addiction services, a result of inadequate and inequitable financial support for community-based programs.

In June 1984, the Department of Mental Health drafted a five year plan for service development. The addictions section of that plan calls for the establishment of a state-wide continuum of integrated services. Featuring a continued high priority for services to youth, the plan addresses the need to establish affordable treatment in all areas of the state.

The U.S. Congress has fixed the state allocations for the Alcohol, Drug Abuse, and Mental Health Block grant, a major source of funds for alcohol/drug services in Indiana. Our state's allocation has been established at the same level as federal FY 84. Indiana is one of many states that were capped so that other lower-funded states could receive increased support. In addition, service interruptions and the concurrent discontinuance of some existing services may result due to the mandated implementation of new services to women (P.L. 98-509, ADMS Block Grant reauthorization).

IOWA:

Based on national survey figures 48,669 to 71,728 of Iowa's 13 to 17 year old population abuse alcohol and/or drugs. Whether or not these young people receive help is not a function of need, but depends instead upon their families' economic circumstances and available community resources. In Iowa, adolescents with substance abuse insurance coverage or whose families can afford to pay may be treated on a hospital inpatient basis (with beds set aside for this age group) or in a private adolescent treatment unit. New adolescent hospital units will open next year in two Iowa cities. Except for a private program in one city, these facilities also are open to children whose families qualify under Title XIX (Medicaid). Inpatient care, therefore, is not an option for children whose families are neither well off nor poor. The Iowa Department of Substance Abuse (IDSA) provides some funding for juvenile substance abusers in residential and halfway house settings at four locations in Iowa. Payment for services in IDSA funded facilities are based upon the ability to pay and a sliding fee scale. The small number of juvenile beds existing in the State funded system (51 beds), however, is not meeting Statewide needs.

IDSA does additionally fund 29 treatment programs offering outpatient services to both adults and juveniles. Although outpatient services may be adequate for some adolescents, others will only respond to the more intensive residential or inpatient type of programming. An obvious need exists for provision of more residential beds for juveniles in Iowa who are lacking in financial resources and not eligible for third party payments.

The Iowa Criminal and Juvenile Justice Advisory Council has identified substance abuse as the number one problem in the criminal justice system, yet in many cases chemical dependency is not recognized as a problem or treated as such. Until the chemical dependency problem is dealt with, the juvenile will not be able to appropriately meet society's expectations in other areas of his/her life. It is important that (1) the juvenile justice system refer greater numbers of juveniles for substance abuse evaluations and that (2) increased substance abuse services be made available to meet juvenile needs.

LOUISIANA:

A 1982 study indicated an unmet need for 115 public detox beds. The unmet need for inpatient beds for short-term detox and rehabilitation is large, the demand is heavy and only 1.08% of the target population is being reached at this time. There is also an estimated need for 24 inpatient beds for addicted women along with accomodations for their dependent children. There are 320,821 alcohol and drug abusers not receiving services statewide. Outpatient screening, evaluation and treatment services must be mobilized to meet these needs. There are no long term care inpatient facilities and no halfway houses in the S.W. or central sections of the State. The halfway house in the N.E. section is in a rural, economically depressed area which is not condusive to vocational rehabilitation. The waiting period from detox to continued care in long term facilities has increased from 2 weeks in 1983 to 4 weeks in 1984. There are no substance abuse beds for youth north of Baton Rouge. A capability is needed to provide services to the rapidly escalating numbers of DWI's, to reach a greater number of alcohol and drug abusers among the probation and parole population and to provide services for the incarcerated prisoner population. In the prevention area, there is a need for the capability to provide a comprehensive prevention initiative that can reach every geographic area of the State and to develop an employee assistance program for State employees.

MAINE:

The following areas of need have been identified for alcohol programs/services in Maine:

- Criminal justice -- need for increased outpatient counseling/treatment including adolescent services for probation and parole clients and services for adult inmates.
- Education -- need for increased information dissemination as well as increased education and training of youth, post-secondary institution staff and parent groups.
- Services -- need for a model prevention program to target children of alcoholics; increased adolescent services, including screening/referral, diagnosis/evaluation and outpatient services as well as rehab/residential services; increased outpatient services for rural adults; and need for women's halfway transitional residence and extended care for women.
- Outreach and Training -- need for increased screening/referral and outpatient counseling treatment for county inmates; training for service providers, physicians, law enforcement and judicial staff; and increased diagnostic services for the mentally retarded alcohol abuser.

MARYLAND (ALCOHOL):

The State of Maryland required 795 beds to provide intermediate care to its adult alcoholic population, however, at present there exists an inventory of 623, leaving 172 additional intermediate beds needed. As regards adolescents, the State of Maryland, although in need of 107 intermediate care beds for adolescents, does not have any such beds.

MARYLAND (DRUG):

To assist in meeting the State of Maryland's drug abuse treatment and prevention needs the following goals have been identified for Fiscal Year 1986 through 1988:

- To complete the implementation of a Statewide Evaluation, Diagnostic and Referral process for probationer and parolee access to the drug and alcohol treatment system;
- To increase treatment capacity for narcotic drug dependents;
- To develop and implement drug and alcohol identification and referral for youth coming in contact with the juvenile courts;
- To establish short-term residential treatment for cocaine addiction for the indigent and those unable to afford private provider care;
- To establish a 10-bed short term (28-35) residential drug detoxification and rehabilitation center;
- To create a less restrictive program for long term stablized chemotherapy client;
- To develop a system of volunteer self-help groups throughout the State to provide necessary aftercare and adjunct treatment;
- To implement a Comprehensive Statewide Alcohol and Drug Prevention Program utilizing community development approaches.

MASSACHUSETTS (ALCOHOL):

The Massachusetts Division of Alcoholism has identified the following needs and issues related to the prevention, intervention and treatment of individuals with alcohol-related problems:

- In detoxification centers, staffing shortages, limited admission times and nursing coverage continue to cause difficulties;
- Consideration is being given to the development of different levels of halfway house care to meet the different needs and goals of clients entering halfway houses;
- Custodial alternative programs need to be developed to respond to the needs of individuals who are severely damaged by chronic alcohol abuse and who have a poor prognosis for recovery;
- There is an increased reliance on the publicly funded treatment system to provide outpatient treatment services to indigent DWI clients. However, waiting lists of up to six weeks are not uncommon.

Additional resources are needed to hire staff to meet these new demands.

- A need exists to train prevention center personnel in basic evaluative techniques to further evaluate the impact of their indirect service activities.

MASSACHUSETTS (DRUG):

Massachusetts has shared in the sudden growth of cocaine use. The percent of clients with a primary cocaine problem in Massachusetts publicly funded treatment units has risen from 1% in 1976 to 13.4% in the most recently analyzed period, July - December 1983. The mention of marijuana as a primary drug at time of admission has climbed some, whereas nationally, the use level of marijuana has declined slightly in the past few years. The unemployment rate of the client population is 67% with 9% employed part-time and 20% full-time. The high rate of unemployment indicates that the treatment population is likely to have few financial resources. There is also a need to target services toward specific minority populations in certain geographic areas although statewide programming specifically aimed at minorities is roughly proportional to their numbers in the general population. Although there are problems of rural drug abuse, a high proportion of the Massachusetts population is at greater risk for drug abuse in urban areas.

The Massachusetts Division of Drug Rehabilitation recently conducted a needs assessment study which ranked the health system agencies (HSAs) according to need for drug abuse services. The assessment was based on 13 sociodemographic predictors of need. It was determined that the HSA with the greatest need was HSA IV-B (Boston), followed by HSA I (Western Massachusetts), HSA III (Merrimack Valley Region), HSA IV-A (Cambridge/Waltham area), HSA VI (Northern Massachusetts) and HSA IV-C (Framingham area).

MICHIGAN:

The economic cost of alcohol and/or drug related problems to Michigan is $1.85 billion. Substance abuse is the third most significant health problem facing Michigan's citizens. In addition, the Office of Substance Abuse Services has had an increase in responsibilities which were mandated by the Governor and the legislature. The level of dollars available to meet unacceptably high levels of substance abuse problems and the increased responsibilities, however, has steadily declined. As a result of inadequate inflationary increases over the years, the Michigan substance abuse network has lost 50% of its purchasing power since FY 1979.

The extent of the problem in Michigan is demonstrated by the following facts: there are 800,000 Michigan citizens needing alcohol or drug related treatment services; Southeast Michigan leads the nation in prescription drug abuse; morbidity statistics include 30,000 injuries due to drinking driver crashes; 5% of all birth defects are alcohol-related; and 25% of hospital admissions are substance abuse related. The following areas have been identified as priorities: 1) assistance to our most vulnerable populations: urban poor, Hispanics, American Indians, the elderly; 2) minimum prevention services for those areas without any services; and 3) minimum systems maintenance and research.

MINNESOTA:

Minnesota continues to seek feasibility and need indicators for services to special population groups such as the hearing impaired, Hispanics, Blacks, chronics, women and Southeast Asian populations.

MISSISSIPPI:

Mississippi has not established a system to determine unmet needs. National figures are used to describe the problem.

MISSOURI:

The State of Missouri's FY 1985 Planning Matrix identified the following unmet needs by region:

- Northern Region -
  - 28 detoxification beds
  - 173 residential beds
  - 37,712 non-residential units*
- Western Region -
  - 85 detoxification beds
  - 446 residential beds
  - 102,101 non-residential units
- Central Region -
  - 41 detoxification beds
  - 191 residential beds
  - 44,825 non-residential units
- Eastern Region -
  - 151 detoxification beds
  - 846 residential beds
  - 171,534 non-residential units
- Southwestern Region -
  - 49 detoxification beds
  - 230 residential beds
  - 60,987 non-residential units
- Southeast Region -
  - 33 detoxification beds
  - 165 residential beds
  - 52,821 non-residential units
- Statewide Totals -
  - 387 detoxification beds
  - 2,050 residential beds
  - 451,037 non-residential units

*Non-residential: These services provide outpatient rehabilitation and prevention services.

MONTANA:

Alcoholism is one of the most serious health problems facing Montana today; over 101,000 Montanans are estimated to suffer problems from alcohol use or misuse. Since 1980, Montana has ranked twelfth in the nation for per capita alcohol beverage consumption. The Montana Highway Patrol reports that 50% of all persons killed on Montana highways in 1983 had been drinking and 56% of all drivers killed had been drinking prior to the accident. Alcoholism impacts on many of the state's concerns -- from traffic facilities to child abuse.

Although alcohol is the major drug of abuse in Montana, treatment statistics reveal that the state also has a serious multi-drug problem. Out of 5,690 clients admitted to the state-approved chemical dependency programs in 1983, 44% had a secondary drug problem and 16% had a tertiary problem with drugs other than alcohol.

There are currently 38 state-approved chemical dependency programs in the state with outpatient services provided in all counties. State-approved chemical dependency programs have averaged 9,415 first admissions per year since 1980; 5,512 were primary clients, 1,612 were family member clients and 2,291 were DUI court school clients. During the past four years, DUI admissions have nearly tripled from 1,219 in 1980 to 3,596 in 1983.

Since 1980, 50% of all clients admitted to state-approved programs have completed treatment. Of all clients who completed treatment, 54% were contacted six months after discharge; of those clients contacted, 75% reported total abstinence and 58% were employed.

Major problems noted statewide are: (1) providing inpatient treatment to indigents; (2) a gap in the continuum of care resulting from the lack of transitional living facilities within the state; and (3) a decrease of public funds available for treatment programs due to decreased liquor sales.

NEW HAMPSHIRE:

In New Hampshire it is estimated there are approximately 120,000 troubled persons who either abuse alcohol or misuse drugs. Of that population, it is believed 89,900 are alcohol troubled, 23,000 abuse legally available drugs, and 56,000 use illegal chemicals. These figures support the contention that increasing numbers of people are simultaneously abusing two (2) or more substances. Furthermore, it is also reasonably estimated that for each such substance abuser, there are at least four (4) additional people, either family members or significant others, who are adversely affected and/or at risk. These people, too, require alcohol and drug related services.

The population most threatened is that of the young people. The age of first involvement with drugs, including alcohol, continues to rapidly decrease. The child of the alcoholic or drug abuser is also at issue. Data collected through New Hampshire's (Mini) Drug Abuse Warning Network (DAWN) reveals that alcohol is the most frequently chosen drug with marijuana and cocaine respectively close behind. LSD, surprisingly in view of its negative publicity and supposedly out of vogue status, follows next.

The young though, are not alone in their problem. Abuse of prescription and over-the-counter drugs finds a higher incidence by older populations and among women. Alcohol continues to run very high among all age groups as the drug of choice, no matter what polling method is used.

Although treatment statistics indicate that three (3) times as many alcohol troubled males seek treatment as do females, research shows that this is not a relevant statistic for determining the actual incidence of alcoholism vis-a-vis gender. A principal theorem holds that women have traditionally not sought treatment for a variety of reasons, not the least of which is a lack of appropriate resources to adequately meet their specialized needs. Data collected concerning New Hampshire supports this.

O.A.D.A.P. goals and objectives for FY 1985 addressed these critical areas and others as follows:

- Data collected over a seven (7) month period has pointed out the fact that the needs and problems of the driving while intoxicated (DWI) second offender greatly exceed those of the first offender, and a more intensified approach in the form of a pilot project is necessary to address them.
- In view of the fact that present O.A.D.A.P. contracted alcoholism treatment centers have long waiting lists, there is a need for an additional treatment center to serve uninsured clients.

- Selected alcohol crisis intervention site caseloads indicate that an additional sobriety maintenance center could complement current services.
- Medical detoxification services are often unavailable for people in medical crisis. There is a need to contract with various hospital sites scattered throughout the state to provide detoxification whether or not the person is insured.
- There is a need to develop and contract for additional juvenile beds with a specialized component which has an Outward Bound program as an integral part of the treatment efforts.
- There is a need to expand and specialize training capabilities to provide working information to the numerous professionals in allied fields which deal with substance abusing clientele.
- A process is necessary to implement a mini-grant program for parents' and citizens' groups to receive funds on a 50-50 matching basis to aid them in their prevention efforts in their communities statewide.

NEW JERSEY (DRUG):

At the end of October 1984, there were approximately 300 applicants waiting for admission to drug treatment facilities in New Jersey.

NEW YORK (ALCOHOL):

Despite dramatic growth of clinic services in recent years, the needs of alcoholic persons leaving inpatient or residential settings have not been adequately addressed. When these clients leave the inpatient setting, many continue to need a structured and supportive living situation to continue recovery. Persons who are homeless at the time of discharge from rehabilitation facilities would be more appropriately discharged to a community residence program which provides a structured environment where the alcoholic can receive support for continued abstinence from alcohol while rebuilding social and psychological resources necessary to maintain recovery outside a structural setting. These programs are also appropriate in cases of domestic violence and for persons whose family setting is severely dysfunctional. The total number of community residence beds currently needed in New York is 1,735. The current number of beds available is 689 resulting in a minimum current unmet community residence bed need of 1,046.

There are currently 371 sobering up station beds in the State of New York with 29,384 admissions annually. According to the Division's information systems, the average length of stay (ALOS) is 3.5 days with a 76 percent occupancy rate. To convert these programs to alcohol crisis centers with an average length of stay of 10 days and an occupancy rate of 85 percent will require a total of 947 alcohol crisis center beds. There are currently 716 inpatient detoxification beds in New York State with 32,679 admissions annually with an ALOS of 5.6 days. The Division's inpatient detoxification bed need methodology projects the need for 1,528 beds by 1990 or an additional 812 beds with a planned ALOS of 5 days. The Division plans to convert existing detoxification beds to acute care alcoholism program beds in hospitals and to establish additional acute care alcoholism program beds for alcoholic people who are currently in hospitals for other medical problems as a consequence of their alcoholism . The diversion of 75 percent of the additional 812 detox beds, (609 beds) to alcohol crisis center beds would provide a lower cost alternative for those individuals in need of alcohol withdrawal in a structured setting who do not require medication for withdrawal.

The expansion of alcohol crisis centers and community residences in the state will provide additional capacity to the alcoholism service delivery system to address the needs of homeless alcoholic persons and many alcoholic persons at risk of becoming homeless. Currently, it is estimated that 33.8 percent of sobering up station admissions are homeless.

New York also projects a need for 4,951,225 alcohol-related outpatient visits in 1985 and has established a goal of meeting 50% of the need.

NEW YORK (DRUG):

A great many substance abusers whose problems are serious -- including a substantial number who are the cause of enormous social and economic costs -- are not in treatment. Overall, there are more than 240,000 narcotic addicts and more than 550,000 heavy non-narcotic abusers in the State; of whom, only 75,000-80,000 are known to receive treatment during a year.

At the same time, of particular importance in the prevention of substance abuse is reaching children and youth in their early, formative years. Also, youth who are of high school age, out of school and unemployed, are particularly at risk and constitute an important target group. Increased emphasis is required to prevent the onset of substance abuse and use of such high risk groups who do not benefit from the traditional prevention models.

NORTH DAKOTA:

Unmet needs are services for Native Americans (all treatment phases); adolescents (inpatient treatment and residential care); and 20% of the general treatment population.

OHIO:

Ohio's unmet need in Fiscal Year 1984 in the area of treatment and prevention of alcoholism was considerable. Considering alcoholism alone, it is estimated that the cost for treating the 30,105 indigent Ohioans that annually are in need of treatment is approximately $1,545 per person within the three levels of care -- inpatient, residential, and outpatient. The total cost, therefore, amounts to approximately $46.5 million and brings into focus the severity of the shortfall when matched against the state's share of $12.9 million for alcoholism treatment in fiscal year 1984.

In spite of other funding support, the need for an adequate continuum of care that is accessible particularly to specific populations remains one of the highest of priorities in this state.

In the area of prevention, Ohio has established as one of its primary initiatives the development of a system capable of providing training and consultation to all Ohio communities on prevention/intervention of alcohol and other drug problems. The estimated cost of alcohol and other drug excessive use, abuse, and addiction when applied to all communities is approximately between one billion dollars and two-and-a-half billion dollars annually. In order to significantly impact this problem we must be able to prevent it before its inception and to intervene early once it has developed by implementing the following:

- o planning a state-wide model of intervention training,

- o utilizing personal resources to establish that training for our communities, and
- o educating and training parents, teachers, and youth on how to intervene in their families, schools and communities and prevent addiction, both through demand and supply strategies.

In fiscal year 1984, Ohio's contribution, in terms of funding, was approximately $4 million in the area of prevention and intervention. Again, far short of the existing need.

OKLAHOMA:

Costs to society for alcohol abuse in the United States are estimated to be $120 billion annually. In addition, costs to society for alcohol and drug abuse are greater than for mental illness, yet the treatment funds allocated for the treatment of alcohol and drug abuse is significantly lower than the amount allocated for the treatment of mental illness. In Oklahoma a lack of financial resources is a great concern as well as a lack of administrators and treatment professionals to ensure quality care for the clients.

OREGON:

Prevalence data strongly indicates the need for additional treatment and prevention services. For the state in general, we estimate 174,782 problem drinker/alcoholics. Another 139,939 are abusers of substances other than alcohol. Additionally, we conservatively estimate that there are 7,991 adolescents under age 18 with significant alcohol problems (using daily) and an estimated 12,385 adolescent drug abusers. In dramatic contrast to their widespread problem, only 1,273 adolescents (under the age of 18) were treated last year in publicly funded programs (that represents 3.9% of the total population served in publicly funded programs).

PENNSYLVANIA:

Public interest in dealing with Drug and Alcohol abuse is at an all-time high in Pennsylvania. This public awareness is resulting in an unprecedented demand for publicly supported drug and alcohol treatment, intervention and prevention services. Real statewide progress is being made on many social, health, legal and economic fronts in the Commonwealth to combat drug and alcohol abuse.

The Department of Health has been a critically important partner in promoting drug and alcohol prevention/intervention and treatment programs as a sound social and economic investment.

The service implication of this public awareness is that an opportunity exists to impact on key groups demanding additional drug and alcohol treatment services. The Department has responded to the extent that it can, with statewide initiatives involving:

1) The Department of Education;

2) Bureau of Corrections;

3) Implementation of the Statewide Employees Assistant (SEAP) Program;

4) Driving Under the Influence (DUI) Programs;

5) Inter-agency agreements with Department of Aging, and the Offices of Children, Youth and Families, Mental Health, and Mental Retardation within the Department of Public Welfare;

6) United Way of Pennsylvania and Lions Club of Pennsylvania;

7) Treatment Alternatives to Street Crime (TASC) diversion program for drug and alcohol offenders in concert with criminal justice system;

8) Office of Vocational Rehabilitation, Department of Labor and Industry.

The cumulative impact of these initiatives, as well as the Chemical People Project, Mothers Against Drunk Driving (MADD), Public Schools, Colleges/Universities, etc. have created heightened expectations for effective programming.

Because of this surge in requests for services, the demand is far in excess of our systems capacity. Generous increases over the past few years in our state appropriation have offset the final federal block cuts which took effect on 7/1/84. The Program Revision Request (PRR) of $2.8 million will give our system a capacity to impact the real demand for services instead of responding to offset federal cuts.

The major emphasis/expansion areas which comprise the Office of Drug and Alcohol Programs PRR of $2.8 million are:

- adolescent treatment;
- women;
- intervention and treatment services for juvenile DWI offenders;
- services for drug and alcohol abusing teenagers;
- joint efforts with Department of Mental Retardation;
- increased emergency services and availability of licensed shelters for public inebriate or clients who are not commitable under the Mental Health Procedures Act.

PUERTO RICO:

Prevention Needs:

- To re-establish the Humacao Prevention Center, thereby increasing services in the East part of the Island, at a total cost of $74,568.
- To provide two additional technicians for the Mobile Units to broaden coverage in the center of the Island and four additional technicians for the Centers in Pajardo and Guayama, 2 on each Center, at a total cost of $71,850.
- To intensify the mass media effort to carry a Prevention message to the majority of Island residents, at a cost of $34,500.
- To increase personnel in the Juvenile Restitution Program at a cost of $121,768.00.

Treatment Needs:

- Creation of a complete treatment center in the Eastern area. This would include a CEDE, a Drug Free Center for adults, children and adolescents. This center would cost $484,877.
- Establish a Drug Treatment Center for Alcoholism in Manati at a cost of $68,597.
- To increase the staff in the Driving While Intoxicated Program (DWI), at a cost of $86,052.
- To establish a specialized treatment center for women in the rural area in which the rehabilitation phase must be emphasized through an intensive program of education and training.
- To set up a program of orientation, treatment and training for the elderly with a problem of drug addiction or alcoholism.
- To provide a telephone line for orientation services attended by specialized personnel.
- To expand the prevention services through the establishment of ex-addicts associations who serve as counselors and preventive elements.
- To establish specialized module units of addiction services in the health centers of the Health Department in all the municipalities of the Island.
- To strengthen the treatment modules in the penal institutions and to set up new modules in the institutions needed.
- To expand services in or to the Courts of Arecibo, Aibonito, Caguas, Mayaguez and Aguadilla, as well as to the Industrial Schools for Girls at Ponce and Boys at Mayaguez. Present staff is required to cover three or four areas within their scope of work, thereby, decreasing the level of service available to all clients. This could be achieved at a cost of $78,116.

RHODE ISLAND:

Of the estimated 58,000 to 64,000 alcohol troubled people in Rhode Island, approximately 10,000 people are currently receiving alcohol treatment services. There are an estimated 24,000 people abusing drugs other than alcohol and 2,500 people are currently receiving drug treatment services. One substance abuser affects the lives of three or four people significantly enough to require intervention for these people also.

In 1983, the United Way conducted a major Needs Assessment which "confirms that abuse of alcohol among adolescents is a major problem in Rhode Island." The abuse of drugs other than alcohol also ranked among the fifteen (15) problems identified in that assessment. The following trends were also identified:

- School superintendents confirmed an increase in alcohol abuse among younger children and indicated that experimentation is beginning in younger age groups, with alcohol often stored in students' lockers.

- Hospital and emergency room administrators report that they are seeing abuse of alcohol in younger age groups.
- The Director of the Department for Children and Their Families cited alcohol abuse as a major problem among those for whom the department is responsible, especially those at the Training School.

The Division of Substance Abuse has identified the development of a comprehensive plan and service system to address the needs of children and adolescents as an objective in the Substance Abuse State Plan.

SOUTH CAROLINA:

In recent years, local and central monies have fallen far short of alcohol and drug service need. The local money has fallen short because of a smaller than anticipated increase in minibottle revenue earmarked for services. State or centrally controlled monies have fallen short due to a combination of Federal fund reductions, inflation and State reductions. When inflation was considered, State money, exclusive of minibottle but including Federal funds, actually decreased by 20.3 percent between FY 1978 and 1984, a period when the number of clients receiving direct services increased by 27.7 percent to 33,144 from 24,031.

The South Carolina services system is efficient. In fiscal year 1984, 295,730 hours of outpatient treatment hours, 1,378,944 hours of residential care and 2,973,375 hours of service were provided. This was done at a cost to the state of $6,859,138, or $2.31 per hour. This efficiency was gained through the combination of local responsiveness and centralized accountability.

Priority needs identified by the State of South Carolina include:

- Increased funding to local governing bodies which provide services and identify local needs;
- Extension of prevention projects in schools, colleges, universities and communities;
- Support for intervention projects to demonstrate the efficiency of working with problem youth in institutions throughout the State including the John De La Howe School and the S.C. School for the Deaf and Blind;
- Expansion of the School Intervention Project in grades 7-12;
- Additional personnel to reduce current delays in enrollments and assessments conducted through the Alcohol and Drug Safety Action and Pretrial Programs; and
- Continuation of outpatient services for indigents.

TEXAS (ALCOHOL):

To demonstrate the unmet need for prevention and treatment services the Texas Commission on Alcoholism (TCA) submitted to the State legislature a budget that included an Activity Decision Package. The package contains requests for: an increase in the number of intensive prevention programs for children of alcoholics and school and college students; funding to train staff of community organizations and conduct Statewide workshops to increase the skill levels of prevention, intervention and treatment providers; funding to continue effective community-based treatment and rehabilitation services and develop new services; funding to establish a network of community-based treatment and rehabilitation programs and activities that provide services for 43,734 persons abusing alcohol and services to their family numbers; funding to provide case finding, screening and referral, family education, and early intervention services to between 9,770 and 13,390 persons; funding to maintain and enforce minimum standards for the uniform operation of DWI Education Programs through certification and recertification of at least 108 programs serving all counties in the State, to increase the number of DWI offenders served by certified DWI Education Programs from 25,000 to 45,000 for each year of the biennium, and to process, evaluate and provide follow-up on 108 monitoring visit reports conducted on DWI Education Programs; to provide 573,200 employees, self-employed professionals, and their family members with access to employee assistance programs and peer intervention programs each year; and funding to meet legislatives mandates and promote operating efficiency by providing administrative, fiscal, auditing, personnel, licensure, certification, and general support services to the Commission.

TEXAS (DRUG):

The Governors Task Force on Inhalant Abuse reported that an estimated 80,000 Texans were using inhalants, mostly young people, yet Texas had no facilities designed for residential treatment of adolescent inhalant abusers. An opinion survey of participants at five regional drug abuse forums in 1984 showed that 98 percent of the respondents believed that drug problems in their community were serious and 89 percent believed the problem was growing. Also, our treatment contractors which maintained waiting lists reported thousands of clients waiting for admissions, while many large areas of Texas have no State supported prevention or treatment programs of any kind. Although the full extent of needs for treatment and prevention of drug abuse during 1984 cannot be determined due to insufficient data, these specific reports indicate some of the unmet needs in Texas.

UTAH:

To satisfy the unmet need for services the State of Utah has:

- Requested from the legislature an increase in funds for youth/adolescent treatment and early intervention. It is anticipated that $4 million will be obtained for this project through a tax on cigarettes.
- Conducted a small demonstration project for development of alcohol treatment services for Hispanics.
- Developed a new alcohol and drug prevention program for risk group of 18-25 years old.

VERMONT:

Vermont treatment programs are currently facing an increase in referrals from several services. Those include schools, the statewide EAP and the DWI Driver Rehabilitation Schools. Increased awareness on the part of the public and medical community is also contributing. Vermont currently has no specialized residential program serving women or youth.

Many programs are entering their third year of level funding and the need for increased resources is acute.

VIRGINIA:

We are experiencing an increasing demand for detoxification and residential services. Also, Virginia is in the process of developing a plan which will identify specific areas of need for alcohol and drug prevention and treatment services.

WASHINGTON:

Most counties do not have sufficient funds to provide outpatient treatment services that are tailored specifically for alcohol and drug abusing youth. Within the past year, the Bureau of Alcoholism and Substance Abuse has initiated and funded two pilot adolescent outpatient treatment agencies and two inpatient agencies for substance abusing teenagers.

We estimate that 25,000 adolescents need treatment for substance abuse, most of whom would benefit from outpatient treatment. During 1984, 751 juveniles were treated in specialized youth treatment agencies and 4,800 were treated in adult oriented facilities.

WEST VIRGINIA:

Our chief unmet needs are in the area of adolescent treatment services, including outpatient, day programming, and residential. Our emergency shelter system for the public inebriate should be expanded. More emphasis must be placed on prevention/early intervention programming.

WISCONSIN:

The Wisconsin Office of Alcohol and Other Drug Abuse recently submitted to the State legislature a budget request for several projects that would assist them in meeting the needs of the citizens of Wisconsin. Those projects included:

- funds to increase and expand existing prevention programs on American Indian Reservations;
- an expansion of treatment services due to an increase in intoxicated driver program referrals;
- funds for a pilot detoxification unit for adolescents (2 year pilot, 10 bed facility);
- an education program for correctional facilities which addresses physical and lifestyle effects related to chemical abuse;
- 5 - 6 trial human services facilitator positions to increase communication and understanding between counties and American Indian Reservations;
- increased funding for services to children and families related to adolescent alcohol and drug abuse; and
- targeted program allocations for long term support populations with a special emphasis for minorities and a community program for chronic alcoholics.

ATTACHMENT B

STATEMENT OF THE ALCOHOL AND DRUG PROBLEMS ASSOCIATION OF NORTH AMERICA; AMERICAN ACADEMY OF CHILD PSYCHIATRY; AMERICAN ASSOCIATION OF CHAIRMEN OF DEPARTMENTS OF PSYCHIATRY; AMERICAN ASSOCIATION OF DIRECTORS OF PSYCHIATRIC RESIDENCY TRAINING; AMERICAN ASSOCIATION FOR COUNSELING AND DEVELOPMENT; AMERICAN MENTAL HEALTH COUNSELORS ASSOCIATION; AMERICAN NURSES ASSOCIATION; AMERICAN ORTHOPSYCHIATRIC ASSOCIATION; AMERICAN PSYCHIATRIC ASSOCIATION; AMERICAN PSYCHOLOGICAL ASSOCIATION; AMERICAN SOCIETY FOR ADOLESCENT PSYCHIATRY; AMERICANS FOR SUBSTANCE ABUSE PREVENTION; ASSOCIATION FOR THE ADVANCEMENT OF PSYCHOLOGY; ASSOCIATION OF PSYCHIATRIC OUTPATIENT CENTERS OF THE AMERICAS; CAREINSTITUTE; CHILD WELFARE LEAGUE; CORPORATION FOR THE ADVANCEMENT OF PSYCHIATRY; INTERNATIONAL ASSOCIATION OF PSYCHOSOCIAL REHABILITATIVE SERVICES; NATIONAL ALLIANCE FOR THE MENTALLY ILL; NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS; NATIONAL ASSOCIATION OF STATE ALCOHOL AND DRUG ABUSE DIRECTORS; NATIONAL ASSOCIATION OF STATE MENTAL HEALTH PROGRAM DIRECTORS; NATIONAL COMMITTEE AGAINST MENTAL ILLNESS; NATIONAL COUNCIL OF COMMUNITY MENTAL HEALTH CENTERS; NATIONAL COUNCIL ON ALCOHOLISM; NATIONAL MENTAL HEALTH ASSOCIATION; AND THERAPEUTIC COMMUNITIES OF AMERICA

OVERVIEW

The health consequences of the disorders and health-related behaviors in the ADAMHA domain are immense. According to the recent report of the Board on Mental Health and Behavioral Medicine of the Institute of Medicine entitled "Research on Mental Illness and Addictive Disorders: Progress and Prospects":

> "Mental disorders and addictive states, especially when severe or chronic, cause personal, economic, and social upheaval both for afflicted individuals and for those close to them. In the United States alone, conservative estimates suggest that mental disorders and addictions directly afflict 30 to 45 million people and cost $20 billion annually in direct health-care expenditures. They contribute especially to morbidity, using such measures as utilization of long-term care and Social Security Disability, and the indirect costs to society, including lost productivity, social services, and crime control. Overall, yearly direct and indirect expenses total an estimated $185 billion. Costs are especially high for the severe mental problems of childhood, which can produce lifelong debilitation. These data suggest that economic consequences of the disorders under the ADAMHA purview are comparable to those for heart disease and cancer."

At the same time, the federal government must maintain a leadership role in the support of training for mental health providers to assure the improved availability and quality of care for all Americans suffering from mental or addictive disorders. The federal government must also continue, through the ADM Block Grant funds and technical assistance support, to provide funding for substance abuse and community mental health services to forge a partnership amongst federal and state governments and community-level providers. Support of services demonstration grants is essential, particularly as the nation seeks to address one of the most difficult mental health system problems of today — the homelessness of many seriously mentally ill people who lack necessary mental health treatment and support services.

This document represents the views of a coalition of organizations deeply concerned with the inadequacy of the President's proposed fiscal 1986 budget for the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA). The level of funding on the disorders in the ADAMHA domain is now, and has for some time been, far too low.

The alternative budget which we submit is responsible and extremely well-justified. Recent studies summarizing the remarkable progress in understanding, preventing, and treating mental and addictive disorders and the highly promising directions for further advances in understanding and treating these disorders make it imperative that the federal government make a major increased investment in the ADAMHA programs.

RESEARCH AND RESEARCH TRAINING

NATIONAL INSTITUTE OF MENTAL HEALTH (NIMH)

(in millions of dollars)

	FY '85	Current Services FY '86 *	President's FY '86	Our Proposal FY '86
Research	$196.2	$224.1	$190.2	$252.8
Research Training	$ 18	$ 18.8	$ 18	$ 24.1

(* - estimate of required budget authority assuming no policy changes from fiscal 1985)

One of the missions of the National Institute of Mental Health (NIMH) is to support research to improve, treat, and prevent mental illnesses, promote mental health and rehabilitate affected individuals.

In recent years research on mental illness, on brain structure and function, and on behavior has represented a most effective counteraction against these devastating disorders. Futher potential breakthroughs are, however, hindered by lack of funds. Through research, opportunities to understand the causes of mental illness, to treat disorders more effectively and to prevent much of the chronicity associated with psychiatric illness will expand swiftly.

Our alternative budget proposal takes into account the current opportunities and needs of the field and is consistent with those made by the Institute of Medicine. Our proposal would permit:

- Award of 390 new and competing investigator-initiated, research project grants at review group-recommended levels, an increase of 10 percent over the number awarded in 1985.
- Funding 100 percent of recommended continuation costs for ongoing projects.
- Support of 1100 research trainees in 1986, 250 more than are projected to receive support in 1985. By 1990, the number of men and women training for careers in mental health research should stabilize at 1500 annually, as recommended by the National Academy of Sciences.
- Expansion of the NIMH Physician/Scientist and New Clinical Investigator Award programs to respond to a severe shortage of trained, expert researchers.
- Support for field-initiated research such as Collaborative Agreements, Research Centers, the Small Grants and Minority Biomedical Support programs, and other initiatives.
- New funds for the Intramural Research Program to permit addition of research positions; revitalization/acquisition of essential research equipment; and initial planning for renovation/construction of clinical and laboratory facilities.

NATIONAL INSTITUTE ON DRUG ABUSE (NIDA)
(in millions of dollars)

	FY '85	Current Services FY '86	President's FY '86	Our Proposal FY '86
Research	$ 64.6	$ 74.4	$ 68.6	$ 79.6
Research Training	$ 1.5	$ 1.6	$ 1.5	$ 1.6

The National Institute on Drug Abuse (NIDA) supports research directed at improving our understanding of the causes and consequences of drug abuse and the development of improved drug abuse prevention and treatment techniques. Biological, behavioral and social science research is needed to develop new knowledge for prevention and treatment of this complex problem. Over the last decade, NIDA has been recognized by the scientific community for its unprecedented advances in our understanding the mechanisms of brain functioning and their relationship to drug use, advances which have pushed drug abuse research into the forefront of the neurosciences. Psychological and social research is beginning to yield needed information about the incidence use patterns, associated behavioral changes, and long-term mental and behavioral effects of drug use. Such data are vital for effective treatment and educational efforts.

The Institute of Medicine's landmark study highlights exciting research undertaken by NIDA and describes extremely promising areas of new research. This alternative budget proposal takes into account these new opportunities. Our proposal would permit:

* Award of 144 new and competing investigator-initiated research project grants, an increase of 10 percent over the number awarded in 1985.

* Funding 100 percent of recommended continuation costs for ongoing projects.

* Continuation of the $1.6 million research training budget as a minimum investment into developing trained scientists.

* Expansion in other Research Mechanisms to support important prevention, evaluation and demonstration projects to assess the effectiveness of various prevention/intervention strategies: Implementation of a junior high school survey to assess the incidence and prevalence of drug use among this population; Surveys to fill in gaps in current information on the use of drugs by ethnic minorities and school drop-out populations; Expansion of the Drug Abuse Warning Network to permit a representative, national sample of emergency room admissions and coroners' reports on drug use and related health problems.

* Increased funding of the Intramural Research program to facilitate the start-up of a long-awaited adolescent treatment research program. The adolescent program is dependent on the Intramural Research program's capability to expand its patient treatment capacity from 10 to 32 beds.

NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM (NIAAA)
(in millions of dollars)

	FY '85	Current Services FY '86	President's FY '86	Our Proposal FY '86
Research	$ 49.0	$ 61.8	$ 52.6	$ 68.7
Research Training	$ 1.5	$ 1.6	$ 1.5	$ 2.7

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) supports research aimed at developing knowledge to improve treatment which can lead ultimately to the prevention of alcohol abuse and its tragic consequences. NIAAA's research program offers tremendous opportunities for advances in services that can reduce a major social problem and serious disorder.

The level and range of opportunities for productive alcohol research as noted in the Institute of Medicine study have never been greater. Recent advances in understanding the interactions of nutrition, alcohol, and genetics have led to a better understanding of the causes of alcohol-derived Organic Brain Syndromes. Additional research is needed to develop a uniquely sensitive assay for measuring brain serotonin; understand the nature of tolerance as a biological form of memory; identify a genetic predisposition to alcoholism; and examine the social ramifications of the alcohol-violence syndrome. Our proposal would permit:

* Award of 110 new investigator-initiated research project grants, only a 10 percent increase over the number approved by Congress in FY 1985.

* Funding of 100 percent of recommended continuation costs for ongoing projects and restoration of reductions incurred in FY 1985 when the funding level was not sufficient to maintain current services.

* Expansion in Research Centers; Increased Research Scientist awards with special emphasis on clinical researchers; Emphasis on physician scientists and academic teacher awards; and restoration of epidemiology contracts to last year's level.

* An increase in the Intramural Research program so that scientists can initiate additional high-priority research into alcohol-induced pathology and disability, trauma, and alcohol-related performance impairment through application of new instrumentation, including the use of nuclear magnetic resonance (NMR) technology.

* Significant expansion in Research Training to assure long-term growth toward the level recommended by the Institute of Medicine. Molecular biologists, clinical epidemiologists and neuropharmacologists are particularly needed.

CLINICAL TRAINING
(in millions of dollars)

	FY '85	Current Services FY '86	President's FY '86	Our Proposal FY '86
NIMH	$ 22	$ 22	$ —	$ 26
NIDA	$ —	$ —	$ --	$ 1
NIAAA	$ —	$ —	$ --	$ 1

For the fourth consecutive year, the President proposes the termination of this activity. This program trains psychiatrists, psychologists, psychiatric nurses, social workers, mental health counselors and para-professionals and supports state manpower development. Federal support is still vital, especially in view of growing evidence that certain populations and geographic areas are underserved. This includes enormous numbers of senior citizens, children, jailed populations and chronically mentally ill living in the community. We endorse Congress' continued direction of NIMH (through report language) to focus the program on these targeted areas. We also support Congress' call for an equitable distribution of funds amongst the disciplines and for the Minority Fellowship Programs. We feel that the flexibility to accommodate the legitimate differences in training activities should be preserved. An appropriation of $26 million for NIMH clinical training would assure needed continuation support and modest new growth to better implement the Congressional initiatives.

Additionally, P.L. 98-509, the Alcohol, Drug Abuse and Mental Health Amendments of 1984, authorizes grants to support the training of health professionals in the identification and treatment of alcohol and drug abuse problems. Before the alcohol and drug abuse clinical training programs were defunded in 1982, the training system consisted of grants to States, national training centers and career development and management internship programs. The Administration, in its request to eliminate the clinical training programs, expressed the belief that there already existed an adequate pool of alcohol and drug abuse program personnel. It was also expected that the States and the private sector would be able to assume funding for these training activities once Federal funds were withdrawn. This has not been the case, however, and many of the training programs which took over a decade to develop and refine have been eliminated.

It should be remembered that the alcohol and drug abuse fields have more minorities, recovering people and non-degree staff than many of the traditional health fields. The alcohol and drug abuse field, however, is not getting any Federal support for the professional training of core personnel. In our judgement, the NIDA and NIAAA clinical training programs should receive at least a minimum appropriation of $1 million each.

ALCOHOL, DRUG ABUSE AND MENTAL HEALTH BLOCK GRANT
(in millions of dollars)

FY'85	Current Services FY '86 *	President's FY'86	Our Proposal FY'86
$ 490	$ 515	$ 490	$ 545

(* - assumes 5% inflation rate)

In 1981, alcohol, drug abuse and mental health categorical programs were consolidated into the Alcohol, Drug Abuse and Mental Health (ADM) Block Grant as part of the Omnibus Reconciliation Act of 1981 (PL 97-35). The ADM Block Grant is essentially two block grant programs within one authority, with different requirements and provisions for substance abuse programs and community-based mental health services. In 1984, Congress extended the ADM Block Grant for three years while revising the funding formula and specifically targeting a portion of the funds for new and expanded services for women and children suffering from substance abuse and mental disorders. The authorization levels for the ADM Block Grant are: $515 million in FY'85, $545 million in FY'86 and $576 million in FY'87.

Prior to the implementation of the ADM Block Grant in 1981, alcohol, drug abuse and mental health programs were categorically funded at a $638 million level. In FY'85, the current funding level is $490 million -- a 23% reduction from FY'81. If inflation is taken into account, the actual reduction of funding for substance abuse and mental health serivces reaches over 35% in real dollars. Although federal support for these programs has diminished over the last few years, the demand for substance abuse and mental health services has increased. Moreover, it is well recognized that there is a growing mentally ill homeless population which clearly indicates that the need for mental health and alcohol and drug abuse services has outstripped the financial base of support for these services.

The ADM Block Grant Amendments revised the funding formula for the distribution of ADM funds to a population/per capita income-based formula in order to better reflect the "needs" of each state with respect to these services. However, in moving to a population/per capita income formula, 25 states and the District of Columbia received no additional funds in FY'85. The ADM Block Grant Amendments also established a 10% set-aside for seriously mentally disturbed children and unserved or underserved populations and a 5% set-aside of the total ADM state allotments for women suffering from substance abuse. These set-asides will further erode existing services for all populations throughout the country (especially in the 25 "frozen" states and the District of Columbia) unless FY'86 funding levels are substantially raised. Attached is a table detailing state-by-state funding levels at the FY'85 and FY'86 authorization levels.

The ADM Block Grant is the foundation of funding for substance abuse and community mental health services, which helps forge a partnership among federal and state governments and community-level providers. The adoption of the proposed funding level of $545 million would signal a strong continuing federal commitment to those persons suffering from substance abuse and mental illness.

State	FY 1985	FY 1986			
		Current Services Level* $515 Million		Coalition's Recommendation -$545 Million	
	Appropriation	Increase	Total	Increase	Total
Alabama	9,328,000	467,500	9,795,500	1,028,500	10,356,500
Alaska	2,093,000	40,000	2,133,000	88,000	2,181,000
Arizona	9,004,000	322,500	9,326,500	709,500	9,713,500
Arkansas	6,385,000	280,000	6,665,000	616,000	7,001,000
California	48,406,000	2,467,500	50,873,500	5,428,500	53,834,500
Colorado	7,004,000	312,500	7,316,500	687,500	7,691,500
Connecticut	6,985,000	295,000	7,280,000	649,000	7,634,000
Delaware	1,428,000	60,000	1,488,000	132,000	1,560,000
Florida	24,033,000	1,122,500	25,155,500	2,469,500	26,502,500
Georgia	11,093,000	642,500	11,735,500	1,413,500	12,506,500
Hawaii	2,827,000	102,500	2,929,500	225,500	3,052,500
Idaho	1,660,000	112,500	1,772,500	247,500	1,907,500
Illinois	19,574,000	1,155,000	20,729,000	2,541,000	22,115,000
Indiana	19,524,000	600,000	20,124,000	1,320,000	20,844,000
Iowa	2,936,000	310,000	3,246,000	682,000	3,618,000
Kansas	3,962,000	245,000	4,207,000	539,000	4,501,000
Kentucky	4,551,000	430,000	4,981,000	946,000	5,497,000
Louisiana	5,665,000	487,500	6,152,500	1,072,500	6,737,500
Maine	3,733,000	130,000	3,863,000	286,000	4,019,000
Maryland	4,871,000	427,500	5,298,500	940,500	5,811,500
Massachusetts	18,240,000	572,500	18,812,500	1,259,500	19,499,500
Michigan	15,948,000	955,000	16,903,000	2,101,000	18,049,000
Minnesota	4,933,000	427,500	5,360,500	940,500	5,873,500
Mississippi	5,165,000	327,500	5,492,500	720,500	5,885,500
Missouri	9,804,000	535,000	10,339,000	1,177,000	10,981,000
Montana	2,153,000	90,000	2,243,000	198,000	2,351,000
Nebraska	2,683,000	167,500	2,850,500	368,500	3,051,500
Nevada	2,897,000	87,500	2,984,500	192,500	3,089,500
New Hampshire	3,844,000	100,000	3,944,000	220,000	4,064,000
New Jersey	20,647,000	717,500	21,364,500	1,578,500	22,225,500
New Mexico	4,934,000	160,000	5,094,000	352,000	5,286,000
New York	40,097,000	1,762,500	41,859,500	3,877,500	43,974,500
North Carolina	10,963,000	700,000	11,663,000	1,540,000	12,503,000
North Dakota	1,163,000	70,000	1,233,000	154,000	1,317,000
Ohio	23,585,000	1,142,500	24,727,500	2,513,500	26,098,500
Oklahoma	7,775,000	347,500	8,122,500	764,500	8,539,500
Oregon	5,670,000	287,500	5,957,500	632,500	6,302,500
Pennsylvania	25,114,000	1,252,500	26,366,500	2,755,500	27,869,500
Rhode Island	4,417,000	100,000	4,517,000	220,000	4,637,000
South Carolina	6,684,000	387,500	7,071,500	852,500	7,536,500
South Dakota	3,100,000	77,500	3,177,500	170,500	3,270,500
Tennessee	7,798,000	542,500	8,340,500	1,193,500	8,991,500
Texas	21,446,000	1,627,500	23,073,500	3,580,500	25,026,500
Utah	3,778,000	192,500	3,970,500	423,500	4,201,500
Vermont	3,313,000	57,500	3,370,500	126,500	3,439,500
Virginia	8,384,000	572,500	8,956,500	1,259,500	9,643,500
Washington	8,977,000	437,500	9,414,500	962,500	9,939,500
West Virginia	4,292,000	230,000	4,522,000	506,000	4,798,000
Wisconsin	5,263,000	502,500	5,765,500	1,105,500	6,368,500
Wyoming	768,000	50,000	818,000	110,000	878,000
D. C.	2,467,000	55,000	2,522,000	121,000	2,588,000
Guam	536,000	10,000	546,000	22,000	558,000
Puerto Rico	6,875,000	340,000	7,215,000	748,000	7,623,000
Virgin Islands	1,113,000	10,000	1,123,000	22,000	1,135,000
Others	112,000	15,000	127,000	33,000	145,000
TOTAL	$ 490,000,000	$24,920,000	$514,920,000	$54,824,000	$544,824,000

*Based on a five percent (5%) increase above FY 1985 Appropriation

SERVICES DEMONSTRATIONS AND STATE PLANNING GRANTS
(in millions of dollars)

	FY'85	Current Services FY'86	President's FY'86	Our Proposal FY'86
Community Support	$ 10.5	$ 11.0	$ —	$ 20.0
State Planning	$ 2.5	$ 2.6	$ —	$ 5.0

The NIMH Community Support Program (CSP), targeted first towards the special problems of serving chronically mentally ill adults in the community, was expanded two years ago to include an initiative aimed at severely emotionally disturbed children and adolescents. In 1984, PL 98-509 established an authority for a broader range of services, research and demonstration projects modeled after CSP, and targeted to high-priority populations.

The demonstration grant authority should be fully funded in FY 1986. These funds should be used to expand initiatives on problems of homeless mentally ill individuals and to initiate local demonstration projects to test models of providing services to this group; to plan and initiate demonstration projects on the more effective use and coordination of services for elderly persons who suffer from serious mental illnesses; to continue existing CSP initiatives for chronically mentally ill adults; to continue and expand the Children and Adolescent Service System Program (CASSP) for seriously emotionally disturbed children; and to continue to conduct important services system research.

The CSP approach will prove particularly valuable in addressing the single most difficult mental health system problem of today -- the homelessness of many seriously mentally ill people who lack shelter, social and support services,and mental health and health treatment. Funds should be used to support research and services such as outreach, mental health screening, crisis housing, health services, case management, training, utilization of volunteers and encouragement of private sector initiatives.

The recommendation would also expand funding for the adult and children and adolescent initiatives. The estimates of the number of children needing special services varies from 3 to 10 million, and the number receiving assistance is much lower than either estimate. The CASSP program was developed to respond to the special problem of linking children to the services that are available at the state and community level, as well as identifying the services that are needed and not available. There are still 24 states and millions of children that are not involved in CASSP.

The program should initiate a statewide services demonstration program for the elderly. NIMH services research funded through CSP should be continued. This research has proved invaluable to the field.

Lastly, we recommend $5 million for a new program to assist the States in planning and coordinating the various social services, rehabilitation, health, education, and mental health services needed by the mentally ill. This effort is critical for providing the continuum of care for the chronically mentally ill as they move from an inpatient to outpatient treatment program and become productive and independent persons in the community.

ADAMHA DIRECT OPERATIONS AND STAFFING
(in thousands of dollars)

	FY '85		Current Services FY '86		President's FY '86		Our Proposal FY '86	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
NIMH								
Research	556	----	556	----	526	----	556	/1
Direct Ops.	413	$34,426	413	$36,467	340 (-103)	$31,735	413	$38,208
NIAA								
Research	99	----	99	----	92	----	116	/2
Direct Ops.	121	$11,961	121	$12,615	108 (-20)	$10,706	153	$14,178
NIDA								
Research	91	----	91	----	85	----	91	/3
Direct Ops.	192	$15,310	192	$16,189	168 (-30)	$13,980	192	$16,945

/1 The amount needed to restore 30 NIMH Intramural Research Positions - $1,200,000.

/2 The amount needed to restore and increase 17 NIAAA Intramural Research Positions - $680,000.

/3 The amount needed to restore and increase 6 NIDA Intramural Research Positions - $240,000.

NIMH

This group recommends the same number of FTEs for NIMH as appropriated for in FY'85 -- 969. House and Senate Committee Report language accompanying the FY'85 Labor-HHS-Education Appropriation Bill, restored 59 positions to the NIMH. The President's FY'86 budget rejects the restoration of 28 of these positions for Clinical Training, Demonstrations, and Technical Assistance; makes further cuts of 30 in the Intramural Research Program; and cuts research staff by 45 FTEs. NIMH still has responsibility for the Demonstration, Technical Assistance, and Clinical Training functions and therefore has had to make up the losses by taking positions away from other areas. The workload for these functions is increasing rapidly, given the increase in the number of States requesting technical assistance; the authorization of demonstration grant and State Planning grant authorities by Congress; and a Clinical Training Program with specific and multiple congressional priorities. Dollar losses in Program Support are severely hampering NIMH's ability to monitor grants and provide assistance to the field. Excluding fixed costs for salaries, rent and utilities, the cuts in Program Support represent a 20 percent cut in NIMH's discretionary budget.

NIAAA

This group recommends a FTE level for Fiscal Year 1986 of 269 for NIAAA. House and Senate Committee Report language accompanying the FY 1985 Labor-HHS-Education Appropriation bill restored 10 positions to NIAAA - 5 positions related to the support of Extramural Research, Training, Prevention and Research Dissemination Actvities and 5 positions for the Intramural Research Activity. The OMB rejected the Appropriations Committees' restoration of the 10 FTEs in FY 1985 and the President's FY 1986 budget makes further cuts of 2 FTEs in the Intramural research staff and 8 FTEs in the Extramural programs. Our request for 269 FTEs for NIAAA would restore 20 FTE reductions proposed for both FY 1985 and 1986 and also add 49 new FTEs which will allow NIAAA to keep up with our proposed program growth. Of the 49 new FTEs, 17 would be allocated to the Intramural Research Program to enable NIAAA to hire scientists to initiate additional high priority research. The remaining 32 new FTEs would be allocated for the hiring of key research, prevention and research dissemination professionals associated with the necessary program growth recommended by this group.

The President's FY 1986 budget request provides $10.7 million for direct operation and program management functions, a decrease of $1.3 million from the FY 1985 appropriation of $12.0 million. Based on our professional judgement, we are requesting a FY 1986 appropriation of $14.7 million, $2.7 million more than the FY 1985 appropriation and $3.9 million more than the President's budget request for FY 1986. The increase will provide funds to support the restoration of the 13 FTEs proposed for reduction in FY 1985 and 1986 and the 49 new FTEs associated with necessary program growth in FY 1986 ($1.4 million); restore program reductions as a result of proposed rescissions ($900,000); and provide higher operational costs as well as restore postponed FY 1986 prevention and research dissemination program efforts ($1.6 million).

As with NIMH, dollar losses in Program Support are severely hampering NIAAA's ability to monitor grants and provide assistance to the field. Excluding fixed costs for salaries, rent and utilities the cuts in Program Support represent a 20 percent cut in NIAAA's discretionary budget.

NIDA

As with the other Institutes, in Fiscal Year 1985 OMB directed the Institute to reduce its total number of FTEs from 283 to 259, a reduction of 24 FTEs (6 FTEs from the Intramural Research Program and 18 from the Direct Operations Budget). An additional reduction of 6 FTEs from the Direct Operations Budget is proposed for Fiscal Year 1986. It is mistakenly believed by many that the NIDA Direct Operations Budget supports only the planning, coordination and general administrative services for the Institute's research and training program. However, within the Direct Operations budget are some of the most important program responsibilities of the Institute - prevention, technology transfer, technical assistance and research information dissemination -- activities of critical importance to the general public and the drug abuse field. The reductions in FTE levels for Fiscal Year 1985 and the proposed reductions in Fiscal Year 1986 will seriously disrupt the Institute's ability to carry out its responsibilities in these critical areas.

We request the Congress to restore the 24 OMB-imposed FTE reductions in Fiscal Year 1985, and the 6 FTE reductions proposed for Fiscal Year 1986. At the Fiscal Year 1985 appropriations level of 283 FTEs, the Institute will be able to continue to effectively carry out its important national responsibilities in the field of drug abuse.

STATEMENT OF HARLEY DIRKS, WASHINGTON REPRESENTATIVE, COMPREHENSIVE CARE CORP.

Senator BURDICK. The next witness will be Harley Dirks, Washington representative, Comprehensive Care Corp.

Mr. DIRKS. Thank you, Mr. Chairman.

Senator BURDICK. Good morning. It is good to see you again.

Mr. DIRKS. Thank you for this opportunity to discuss funding priorities in the health care research field on behalf of Comprehensive Care Corp., a national leader in behavioral medicine programs. CompCare® treats some 43,000 patients per year through its chemical dependency programs, psychiatric programs, physical trauma rehabilitation centers, and employee assistance services. It provides both inpatient and outpatient programs and specialized services for women, children, and adolescents.

We are supportive of good research at the Alcohol, Drug Abuse, and Mental Health Administration, brain function and behavioral research, and studying the inheritance of susceptibility to alcoholism, the toxic effects of alcohol, the incidence and prevalence of chemical dependencies and psychiatric disorders, adolescent alcoholism, and now the children of alcoholics, and the role of the supportive environment in recovery from schizophrenic episodes.

ADAMHA's mission to support research and research training and disseminate research information is a critical one to our society. Mental disorders and chemical dependencies afflict 30 to 45 million people and cost us $250 billion annually in treatment, lost productivity, crime, social welfare programs, and other societal costs and the problem is growing.

There are many areas of clinically related research which need to be pursued, let me cite some examples.

Patient placement—peer reviewers for Medicare and employers daily decide that substantial numbers of chemically dependent or psychiatrically ill individuals cannot be admitted to certain programs because they are not sick enough. Peer reviewers are making these decisions using criteria which has not been validated through clinical research.

Treatment outcome—research is particularly scarce in the areas of alcoholic adolescent treatment outcomes and treatment of cocaine abusers.

Barriers to treatment—research is needed on why people with chemical dependency problems or psychiatric problems go without help for so long before receiving treatment, and the methods for overcoming those barriers.

Objective screening for driving under the influence offenders—these tests need to be refined or new tests developed for screening of drug dependent offenders and adolescent offenders.

Treatment needs formula—based upon the prevalence and incidence of chemical abuse and dependencies and psychiatric disorders, new formulas need to be developed to aid State planning and development agencies in determining whether treatment services are needed in their States.

Eating disorders—anorexia and bulimia can cause severe physical complications and death. Research in this is urgently needed.

Prevalence surveys—to assess the incidence and prevalence of alcohol and drug use among junior high school students, we support the implementation of a survey.

Health hazards and drugs of the in drugs—research is needed in some of the health hazards of such in drugs of adolescents as clove cigarettes, Liquid Paper®, et cetera.

We support the administration's zero funding for health planning until such time as there is a revamping of the program to promote true health planning.

Under Medicare, with the deficit reduction the overriding goal of Congress, we oppose the regulatory initiatives recommended to reduce projected spending.

To help offset the deficit, we urge that additional revenues be raised by boosting Federal excise tax on cigarettes from 32 cents per pack, and raising excise tax on beer and wine as has been done with distilled spirits.

We oppose placing limits on tax-free health benefits paid by employers because it will jeopardize the limited coverage for chemical dependency and psychiatric disorders.

We are aware that ADAMHA is collaborating with HCFA on an 18-month contract to study various classification systems for use in Medicare payment systems for psychiatric and chemical dependency programs, including DRG's, modifiers to DRG's and alternatives to DRG's. This study will not be complete until the end of 1985. With the exemption for alcohol and drug abuse programs ending on October 1, 1985, which means new regulations for alcohol and drug abuse DRG's would have to be drafted this month, this timetable is unrealistic.

PREPARED STATEMENT

Attached to our statement, Mr. Chairman, is a summary of the specific recommendations we make on appropriations. We hope you and the committee will review these when you have your markup on this very extremely important bill.

Thank you.

Senator BURDICK. In your statement, you have some numbers there.

Mr. DIRKS. Yes, sir; I have those on a summary page.

Senator BURDICK. Thank you very much, they will be received.

[The statement follows:]

Statement of Harley Dirks

RECOMMENDATIONS:

1. Appropriate $366 million for NIMH, $98 million for NIDA and $87 million for NIAAA; in accordance with the recommendations of the ADAMHA Appropriations Coalition.
2. Utilize additional research funds to develop research projects on patient placement, treatment outcome, barriers to treatment, DUI screening tests, treatment needs formulas, eating disorders, prevalence surveys, health hazards of "in" drugs, and technical assistance.
3. Appropriate $545 million for ADAMHA block grants.
4. Zero fund health planning, unless program is substantially revised.
5. Oppose freeze on Medicare payments to hospitals. Raise additional revenues through raising federal excise tax on cigarettes, wine and beer.
6. Oppose limits on tax free health benefits paid employers, since it will jeopardized coverage for chemical dependencies and psychiatric disorders.
7. Extend exemptions for alcohol/drug programs from Prospective Payment System for an additional two years to allow data to be analyzed and adequate DRGs to be developed.

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to discuss funding priorities in the health care field on behalf of Comprehensive Care Corporation, a national leader in behavioral medicine programs. CompCare treats some 43,000 patients per year through its chemical dependency programs, psychiatric programs, physical trauma rehabilitation centers, and employee assistance services. It provides both inpatient and outpatient programs and specialized services for women, children and adolescents.

ADAMHA PROGRAMS

CompCare congratulates ADAMHA for its leadership role in brain function and behavior research. The work on endorphins and their receptors has great relevance to chemical dependencies. Brain imaging technologies, supported by ADAMHA, are aiding in the study of many compulsive disorders as well as chemical dependency. Other areas well worthy of mention include ADAMHA's work in studying the inherited susceptibility to alcoholism, the toxic effects of alcohol, the incidence and prevalence of chemical dependencies and psychiatric disorders, adolescent alcoholism and now children of alcoholics, and the role of a supportive environment in recovery from schizophrenic episodes.

ADAHMHA's mission to support research and research training and disseminate research information is a critical one to our society. Mental disorders and chemical dependencies afflict 30 to 45 million people and cost us $250 billion annually (*) in treatment, lost productivity, crime, social welfare programs and other societal costs. And the problems are growing. For example, NIAAA predicts that because of population changes the number of alcoholics in this nation will increase by 1.9 million within the next 10 years.

For these reasons, we view the Administration's proposed fiscal 1986 budget for ADAMHA as inadequate. It is a $39 million cut from FY 1985, at a time when the prestigious Institute of Medicine has called for a marked expansion of research support. IOM recommended $100 million for NIAAA, compared to the Administration's $52.6 million; $100 million for NIDA, compared to the Administration's $68.6 million; and $300 million for NIMH, compared to $190.2 million. In recognition of the deficit reduction commitment, we recommend the committee adopt the proposals of a coalition of alcohol, drug and mental health organzations.

There are many areas of clinically related research which need to be pursued: Some examples:

o Patient Placement—Peer reviewers for Medicare and employers daily decide that substantial numbers of chemically dependent or psychiatrically ill individuals cannot be admitted to certain programs because they are not "sick enough." Peer reviewers are making these decisions using criteria which has not been validated through clinical research. Continued emphasis must be placed on research leading to the development of standardized patient placement systems to match chemically dependent or psychiatrically ill individuals with the appropriate level of care corresponding to the stage or severity of the disease diagnosed. People who are in the middle or late stages of a disease may need hospital care, while those in the early stages may only require outpatient treatment. We believe an adequate patient placement study for chemical dependency would cost approximately $500,000.

o Treatment outcome—research is particularly scarce in the areas of adolescent treatment outcomes and treatment of cocaine abusers.

o Barriers to treatment--research is needed on why people with chemical dependency problems or psychiatric problems go without help for so long before receiving treatment, and the methods for overcoming those barriers. For example, 85 percent of this nation's 14.7 million alcoholics and problem drinkers do not receive formal help for their disease. Why? Of the 10-12 million children suffering from mental disorders, only 500,000 are receiving any kind of treatment through the mental health care system. By contrast, 74 percent of the 7.6 million physically handicapped children in this country receive some sort of service. Why? The U.S. Department of Labor reports that about 55 percent of full-time, private sector employees are covered for alcoholism treatment, 40 percent for drug abuse treatment, yet 75 percent are covered for dental. Why?

o Objective screening tests for Driving Under the Influence offenders--the Mortimer-Filkins test needs to be refined or new tests developed for screening of drug dependent DUI offenders and adolescent DUI offenders. We recommend NIAAA and NIDA collaborate with the Department of Transportation on developing new tests. Once tested, drunk drivers diagnosed as chemically dependent could be referred to legitimate treatment programs, rather than "education" classes.

o Treatment needs formulas--based upon the prevalence and incidence of chemical abuse and dependencies and psychiatric disorders, new formulas need to be developed to aid State Health Planning and Development Agencies in determining whether treatment services are needed in their states.

o Eating disorders--anorexia and bulimia can cause severe physical complications and death. The Institute of Medicine has emphasized, and we concur, that research is urgently needed about their epidemiology, biobehavioral etiology, treatment and prevention.

o Prevalence surveys--to assess the incidence and prevalence of alcohol and drug use among junior high school students, we support implementation of a survey. Additionally, the Drug Abuse Warning Network survey should be expanded to include a national sample of emergency room admissions and coroners' reports.

o Health hazards of the In-Drugs--research is needed on some of the health hazards of such "in" drugs of adolescents as clove cigarettes, Liquid Paper, etc.

To help researchers develop high quality proposals for these and other concepts, we urge ADAMHA to convene a technical assistance conference. The conference could be followed with the designation of specialized ADAMHA staff to provide grant proposal consultations.

Block Grants

The Administration's request for $490 million for alcohol, drug abuse and mental health block grants is at the same level as FY 1985, but in real dollars it is at least a 5 percent cut. To maintain existing services and provide funds for the programs for mentally disturbed children and chemically dependent women authorized in the ADM Block Grant Amendments, we urge adoption of a funding level of $545 million. While federal support for chemical dependency and community mental health services has declined during the past few years, the demand for services continues to increase.

Health Planning

We support the administration's zero funding for health planning, until such time as there is a revamping of the program to promote true health planning. True planning looks at health needs of the country, sets priorities, and fosters access to care at a reasonable cost. By contrast, the current health planning system costs the federal government $64 million annually, impedes the delivery of needed care and reduces competition which could hold down health care costs. The CON process delays the opening of needed chemical dependency and behavioral medicine programs from six months to three years, thereby preventing many people from receiving treatment. Yet cost offset studies, such as the recent Aetna study, show that treatment costs are offset by reductions in overall health care costs following treatment and the Health Insurance Association of America lists alcohol and drug rehabilitation as services with "cost containment" potential.

Medicare

With deficit reduction the over-riding goal of Congress, we understand the Administration's attempt to reduce projected spending for Medicare and Medicaid by more than $5 billion in FY 1986. However, we oppose the regulatory initiatives recommended to reduce the projected spending. The proposed freeze on PPS payments to hospitals at the FY 1985 levels and on payments to PPS-exempt hospitals, beginning Oct. 1, 1985, reneges on a commitment made to hospitals to revise payment rates on an annual basis. Because of inflation, the proposed freezes will actually reduce payments for care to below FY 1985 levels. Continued reductions will produce compromises in both accessibility and quality of care.

To help offset the deficit, we urge that additional revenues be raised by boosting the federal excise tax on cigarettes to 32 cents per pack and by raising the excise tax on beer and wine, as has been done with distilled spirits. Cigarette smoking and the abuse of alcohol are major causes of illness and premature death in the United States. A tenth of the drinking population consumes half the alcoholic beverages sold. We believe those who smoke and drink excessively should help pay for the increased cost that they generate for the medical system.

Tax Cap on Employee Benefits

We oppose placing limits on tax free health benefits paid by employers, because it will jeopardize the limited coverage for chemical dependencies and psychiatric disorders. If faced with a tax cap, employers plan to reduce their benefit coverages. Since chemical dependencies and psychiatric disorders are still highly stigmatized illnesses, these coverages will be the first to go. That would be poor public policy. Treatment for chemical dependency and psychiatric disorders results in subsequent reductions in treatment for other health disorders. Thus a reduction in coverage would markedly increase associated health care costs.

DRGs for Alcoholism, Drug Abuse and Mental Illness

We are aware that ADAMHA is collaborating with HCFA on an 18-month $665,000 contract (Macrosystems) to study various classification systems for use in a Medicare payment system for psychiatric and chemical dependency programs including DRGs, modifiers to DRGs and alternatives to DRGs. This study will not be complete until the end of 1985. Yet the exemption for alcohol and drug programs ends Oct. 1, 1985, which means that new regulations on alcohol/drug DRGs would have to be drafted this month. This timetable is unrealistic.

We urge an extension of the exemption for two years and a set aside in FY 1986 ADAMHA appropriations which would allow for a detailed review of data from a variety of studies being conducted by the National Association of Alcoholism Treatment Programs, National Association of Private Psychiatric Hospitals, American Psychiatric Association, and several others, as well as Macrosystems. With the DRGs serving as a model for private carriers as well as public programs, it is imperative that the chemical dependency and psychiatric DRGs be founded on carefully analyzed data and with adequate consideration given to recommended changes in classifications and weights.

As you tackle the difficult task of health care appropriations, we would ask you to consider a point made by Harvard economist, Rashi Fein Ph.D. He warned in the book, Alcohol in America - The Price We Pay, that "in an era in which society is preoccupied with finding ways to limit total health care expenditures, it is easy for public and private sector decision makers at all levels to ignore or forget the fact that not all parts or activities of the health care system are over-funded. Unilateral reductions in spending can hit with devastating force those health conditions which have historically suffered from relative neglect, yet whose impact has been underestimated."

* Research Triangle Institute's Updated Costs to Society of Alcohol Abuse, Drug Abuse and Mental Illness, 1983

STATEMENT OF C. ROBERT CLONINGER, M.D., PROFESSOR OF PSYCHIATRY AND GENETICS, WASHINGTON UNIVERSITY MEDICAL SCHOOL

Senator BURDICK. Our next witness will be C. Robert Cloninger, M.D., professor of psychiatry and genetics, Washington University Medical School.

Dr. CLONINGER. Thank you, Senator, for the opportunity to testify about the appropriations for NIAAA. I am a professor of psychiatry and genetics at Washington University School of Medicine in St. Louis, and I am here as a member of the research development committee of the Research Society on Alcoholism.

My colleagues and I are seriously disturbed by the widening gap between the opportunities and need for alcohol research, on the one hand, and the amounts proposed for NIAAA by the President in his fiscal year 1986 budget.

As an active researcher in the Alcoholism Research Center at Washington University since 1973, I can testify personally about both the increasing need for alcohol research and the improved scientific opportunities for understanding the causes of alcohol abuse.

Prevalent surveys now indicate that over 20 percent of men have substantial medical or social problems as a result of alcohol abuse at some point in their lives. This is almost twice the risk that was observed only 10 to 15 years ago. To deal effectively with this increasing problem, we must know more about the causes of alcohol abuse.

Recently, with NIAAA support, my colleagues and I have carried out an adoption study of alcohol abusers. We found strong evidence for genetic contributions to the risk of this problem. Alcoholic biological parents have three to four times the risk of alcohol abuse in their adopted-away children, whereas the children who were reared by alcoholic adoptive parents did not have an increased risk.

We identified two subtypes of alcohol abuse with different symptoms and patterns of inheritance, and we are now studying the families of alcoholics to understand the biological and social differences between these two different types of alcohol abusers.

We have cloned the gene for the enzyme that metabolizes alcohol to acetaldehyde, and we are now studying the alcohol metabolism in these families.

Research at several centers has begun to identify the biological factors that are predisposing to alcohol abuse.

These are all factors which I think are very stimulating and exciting for the scientific community, but at the same time we are now being frustrated by the lack of consistent and adequate support for this kind of research which is critical.

In order to follow through on these and other advances, the Institute of Medicine is recommending that $100 million would be the optimal level for alcohol research support. The Research Society on Alcoholism recognizes that with the current budget deficits that this figure may not be possible, but we instead urge you to consider an appropriation for NIAAA research of at least $68 million, an amount that would be equal to the true current services level placed on the 1985 appropriations, plus a very modest growth factor.

At least $61 million would be needed for a true current services level based on Federal 1985 appropriations.

The consequences of this continued low funding proposed by the President of $52.6 million will be severe. It is difficult to maintain faculty, technicians for funding when it is inadequate and uncertain.

Currently the continuation projects are being funded at NIAAA at only 92 to 95 percent of council approved levels, and new and competing renewals at only 90 percent of council approved levels.

Continued funding of projects at reduced levels is a false economy at a time when we really have increasing need and great scientific opportunities.

Also much needed training and support for new investigators is severely limited at present. The $1.5 million for research training at NIAAA needs to be increased by 75 to 100 percent. Every day, I am contacted by people who are interested in the research area but are not sure whether or not this is an opportunity that they can afford because of the uncertainty of future support.

ADAMHA as a whole needs increased support in order to meet its goals. We feel that NIAAA, in particular, needs a relatively greater increase because of the inadequate funding in the past.

I would urge you to consider these recommendations and thank you very much for the consideration.

PREPARED STATEMENT

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF DR. C. ROBERT CLONINGER

Major advances have recently been made on the causes of alcoholism and alcohol abuse as a result of the support of the National Institute on Alcohol Abuse and Alcoholism. As part of the Alcoholism Research Center at Washington University in St.Louis, my colleagues and I carried out a study of the inheritance of alcohol abuse in a large population of 3000 adoptees who were separated from their biological parents at an early age. The adopted away children of alcoholic biological parents had a three to four times greater risk of alcoholism than the children of nonalcoholics, even though they had been reared in normal homes. In contrast the children reared by adoptive parents who were alcoholics did not show any increased risk of alcoholism. This showed that genetic factors are of major importance in the familial transmission of alcoholism. Further study revealed that genetically susceptible children were most likely to become alcohol abusers when reared by non-alcoholic adoptive parents who encouraged heavy recreational drinking.

The findings about the importance of genetic and environmental factors in alcoholism were first published in 1981. Since then we have identified two different types of genetic susceptibility to alcoholism and have begun to identify biochemical and metabolic differences between them. The most common type begins in adulthood and is associated with more rapid development of dependence and tolerance to alcohol. It is associated with few social problems until physical dependence is severe. The second type begins in adolescence often and is associated with impulsive behavior and social problems from alcohol abuse including frequent criminal behavior. Preliminary studies suggest that predisposition to this disorder is associated with differences in brain biochemical function, shown by variability in monoamine levels in cerebrospinal fluid and an enzyme found in both brain and blood platelets (called monoamine oxidase).

In order to understand the biochemical and genetic differences underlying alcoholism, we are studying families of alcoholics for differences in genetic and biochemical markers. My colleagues in the Alcoholism Research Center at Washington University have recently cloned the gene for the enzyme that metabolizes alcohol to acetaldehyde (alcohol dehydrogenase) and developed assays to measure other (non-oxidative) pathways for the metabolism of alcohol. We are now studying these genetic and biochemical systems in families of alcoholics to clarify the basis for heritable forms of alcoholism. Research by several investigators at other centers have begun to identify neurophysiological and biological factors predisposing to alcoholism.

Such research is expensive but necessary if we are ever going to be able to recognize who is susceptible to alcoholism and how to prevent it. Results of prevalence surveys throughout the United States indicate that over 20% of men have substantial medical and/or social problems as a result of alcohol abuse. This represents almost twice the risk of problem drinking that was observed ten to fifteen years ago. More people who are susceptible to alcoholism are being exposed to heavy drinking and the long term costs to the individual and society as a whole are enormous. To deal effectively with the problem we must know more about the causes of alcohol abuse and alcoholism.

Despite the great promise of current research and the enormous costs to society of the current increased abuse of alcohol, disproportionately little federal support for research on alcoholism is available. In FY84 NIAAA's appropriation for research was only 1.1% of the total appropriated for NIH and ADAMHA. The President's FY86 budget would provide $52.6 million for alcohol-related research and $1.5 million for research training. Although this is a slight increase it is inadequate to meet existing commitments and to fund a reasonable proportion of high-quality new research initiatives. Alcoholism Research Centers will be cut back 15%, no Research Scientist Development Awards will be funded, and only 28% of approved research grants could be funded. The level of support proposed by the President is drastically below the $100 million level recommended in a recent(October, 1984) report by the Institute of Medicine titled "Research on Mental Illness and Addictive Disorders." The Research Society on Alcoholism also supports the level of support recommended by the Institute of Medicine.

The consequences of continuing the low funding level proposed by the President will be severe. I am basing this on my own personal observations as an alcohol researcher since 1973. My research on alcoholism began, not because of initial personal interest, but simply because we had adequate federal support for alcohol research in our alcoholism research center. Now investigators are reluctant to begin research careers in the alcohol field because of the inadequate and uncertain support. Many with a personal interest in such research go elsewhere.

In addition it is difficult to recruit and maintain a staff of skilled technicians when levels of support for noncompetitive renewals are frequently arbitrarily reduced by 10 to 15 percent and when funding of competitive applications with excellent priorities is so uncertain. In effect, people cannot rely on judgments about the high quality and importance of alcoholism research but must consider more secure alternatives regardless of their long term value.

Currently the scientific community has a moderate number of skilled researchers who have made important advances in our understanding of alcoholism. However, inadequate support for alcohol research is rapidly eroding this group. Much needed training and support of new investigators is virtually non-existent. All of this is occurring at a time when alcoholism and alcohol abuse is an increasing economic burden on society. The best way to lower these costs is to find an effective treatment or way to prevent these disorders. For example, the introduction of lithium in the treatment of psychiatric disorders has saved an estimated $6.5 billion dollars since its introduction according to the report of the Institute of Medicine. In contrast the total Federal investment in research on mental disorders and addictive states has been substantially less than $3 billion from 1948 to the present. We now have several important clues to the genetic and biochemical causes of alcoholism, but the funds to pursue these clues is inadequate.

As a citizen I appreciate the needs to reduce total Federal spending and our budget deficit. However, these reductions must not be carried out without the most careful attention to long term costs and benefits from alternative allocation of Federal Resources. I am not suggesting reduced support for NIH or other portions of ADAMHA. The support for ADAMHA is generally inadequate. NIMH and NIDA have problems very similar to those at NIAAA. ADAMHA as a whole needs increased support in order to meets its mandated goals. In addition NIAAA needs a relatively greater increase. I strongly urge you to support NIAAA at the level recommended by the Institute of Medicine, that is $100 million.

STATEMENT OF CARLTON K. ERICKSON, PH.D., PRESIDENT, TEXAS RESEARCH SOCIETY ON ALCOHOLISM

Senator BURDICK. Our next witness will be Carlton K. Erickson, Ph.D., president, Texas Research Society on Alcoholism.

Mr. ERICKSON. Good morning. I appreciate the opportunity to speak before the subcommittee this morning.

I am Dr. Carl Erickson, professor of pharmacology and toxicology at the University of Texas at Austin. I am also head of the Alcohol and Drug Abuse Program at the university, as well as a member of the Research Society on Alcoholism, and president of the Texas Research Society on Alcoholism. I am an active biomedical researcher, having worked in the field since 1967, and I have essentially devoted my professional career to research on alcoholism and alcohol abuse.

I would like to depart from my prepared statement and just talk about a few numbers with relation to the NIAAA budget this morning.

The present budget for NIAAA is around $50 million, and I would like to point out that that is only one forty-fifth that allocated for cancer research and one-fifteenth that allocated for heart, lung, and blood disorders. If we assume that cancer, heart, and alcoholism are among the top three diseases, it appears that alcoholism research is really receiving very little in comparison to its emphasis in the society.

It has also been estimated—I have heard a number of figures here this morning about the cost of alcoholism and alcohol problems to society. I would like to take the median figure of around $100 billion as the cost to society. If we were to double the NIAAA budget this year to $100 million, we would still only be one one-thousandth of the cost of these problems to society. I don't think that that is a very farsighted approach to trying to overcome these problems.

The President's budget for 1986 is $64.8 million recommended, and that includes $52.6 million for intramural and extramural research. I would like to propose, along with the other members of the Research Society on Alcoholism, that this increased to between $68 and $69 million because the President's budget has a builtin number of 92 grants to be funded, as mandated by Congress, and $52.6 million would not be enough to fund all of those grants fully. It is expected that there would be a 5- to 10-percent reduction in the budget in new grants if the President's budget were to be followed. That is our reasoning for an increase to $69 million.

I would also like to increase the training allocation, that it be doubled to $3 million, and that the total allocated to NIAAA be around $88 million instead of the President's recommendation of $64.8 million.

I have worked long and hard in the State of Texas to try to raise funds for alcoholism research through private sources and public sources, and foundations and State government, and I can tell you that those types of sources of funding can nowhere near make a dent in our understanding of research and our understanding of the disease if we were to get those funds.

So the Federal Government is really the only source that can provide enough money so that scientists can really do the job of attacking this problem.

Thank you.

Senator BURDICK. Let me ask you one question.

Dr. ERICKSON. Yes.

Senator BURDICK. Are we gaining or losing in the fight against alcoholism?

Dr. ERICKSON. We are gaining, but very slowly. I think that we could gain at approximately a 10 times greater rate with greater funding.

PREPARED STATEMENT

Senator BURDICK. Thank you. We will place your statement in the record at this point.

[The statement follows:]

STATEMENT OF DR. CARLTON K. ERICKSON

My name is Carl Erickson, and I am a Professor of Pharmacology and Toxicology at the University of Texas at Austin. I am also Head of the Alcohol and Drug Abuse Research Program at the University, as well as a member of the Research Society on Alcoholism. I have devoted my career to the study of drugs of abuse, and in particular, alcohol. My interest in alcohol arises not from any family or personal involvement with the disease of alcoholism, but from a scientific standpoint, since alcohol is one of our least understood drugs. How it acts on the brain to cause intoxication and disease is a cause of considerable curiosity and interest to me, and so I have been studying alcohol for over 18 years.

I began research on alcohol in 1967, when I was fortunate to receive a grant from the National Institute on Mental Health. Two years later, in 1969, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) was formed, and funds began to be allocated specifically for alcohol problems. Over the years, the budget of NIAAA has grown slowly. There was even a period from 1979 - 1982 during which the research budget remained stable.

Today, I'd like to take just a few minutes of your time to discuss the budget of NIAAA. As you may recall, the 1980 and 1984 reports from the Institute of Medicine (IOM) recommended substantial increases in the research budget of NIAAA. Fifty percent annual increases for 3 years were suggested for the 1979 NIAAA budget of $22 million, and increases in constant 1983 dollars, to $100 million in FY 1985. We are now beyond that time period, and instead of $100 million, the research budget for NIAAA is only $49 million. The total FY 1985 appropriation for NIAAA, including training and direct operations costs, is $62.4 million. And now your Subcommittee is trying to decide whether to increase or decrease President Reagan's FY 1986 budget request of $64.8 million, which is a 3.8% increase over last year.

I would like to emphasize the fact that the NIAAA budget has not escalated at the rate proposed by the IOM from 1981 - 1985. Only in 1983 was the IOM recommendation followed by Congress. More importantly, the amount of funding devoted to research on alcoholism, the nation's number 2 disease, is only 1/45 that allocated for cancer research (FY 1985 appropriations), 1/15 that allocated for heart, lung, and blood disorders, and less than the amounts allocated for dental research and aging research!

Obviously, the nation is caught in an embarrassing situation where it is only now beginning to recognize the seriousness of alcohol and other drug abuse problems and addictive diseases. Some people recognize how paultry the previous research support has been in these areas: and we are now trying to catch up and go ahead in a time of tight funding. Research on the causes and prevention of alcohol and other drug problems has been the victim of a late start (alcohol research is really only about 15 - 20 years old).-In addition, the stigma associated with the disease of alcoholism, and inability of my colleagues and I to educate the public on what research can do to conquer alcoholism has hurt us.

Let me tell you what I feel alcohol researchers can do for the nation. I can see, for example, a diagnostic test for alcoholism within 5 - 10 years. I can see, in the next 10 -15 years, better prevention methodologies, based upon an increased knowledge of the genetics of alcoholism. I can see, in 15 - 20 years, better and more cost-effective treatments, based upon increased knowledge of the causes of alcoholism. And I can see, in 15 - 20 years, a greatly reduced incidence of the disease, which has remained steady at 5% of the population for the past 5 years. These milestones can be achieved, but only if funding for alcohol research is greatly increased this year and every year thereafter.

Some people may believe that alcoholism is already being adequately treated, and that there is little need for research. This is not true. The economic costs to society of alcohol problems continue to rise each year. In 1980 they were estimated at $48 billion. Estimates since then have been $60 billion and $78 billion, and I recently saw a report that estimated the cost to society at over $100 billion! We must keep in mind that no disease has ever been conquered by only treating the victims. Research must find the causes - only then will the incidence and subsequent economic costs begin to decline.

Any business person realizes that long-term investments are a predictable way to gain significant payoffs in the future. If we commit ourselves to an investment into the causes of alcoholism, by increasing funds for research grants and the training of young scientists in this field, past experience tells us that this will certainly provide future advantages. Do you realize that the investment in cancer research is currently 3.3 cents for each dollar of the economic cost to society, while the investment in alcoholism research is only 4 hundredths of one cent for each dollar of cost?

In 1983 federal tax revenues from the sale of alcoholic beverages totalled $5.7 billion. One tenth of those revenues would have provided NIAAA with 20 times the research budget it had in 1983. Does it make sense to spend only $50 million per year on research into finding the causes and solutions to a disease that costs U.S. taxpayers over $100 billion per year? Do you realize that an investment that matches the cost of several

MX missiles could cover alcoholism research and training costs for the next 5 years, and save thousands of lives, perhaps those of some of your family or friends? Surely anyone can see that President Reagan's FY 1986 recommended budget for NIAAA is not indicative of a far-sighted investment.

I am personally aware of several colleagues who have had grants reviewed by NIAAA, who have received excellent priority scores for projects which will not be funded due to insufficient funds. These scientists may soon get discouraged and turn to other intellectual pursuits. What disturbs me more than anything is that alcoholism, the fetal alcohol syndrome, DWI, child abuse, accidents, and other effects of alcohol abuse will never be conquered unless we can support the good scientists while attracting new ones into this area of research. Just as I was attracted to the field in 1967, we now need to attract more scientists to work on this enormous problem of drug abuse which affects us all. Unless immediate and reasonable research and training funds are forthcoming, we are only going to slide backwards in our goal of conquering these problems.

Members of the Subcommittee, for the past 6 years I have worked diligently to increase funds for alcoholism research in Texas, through state, private and public sources. I know that individuals, foundations and state governments cannot possibly supply enough money to scientists to make a significant dent in the armor which surrounds the mystery of alcoholism. The federal government simply has to take the lead in the conquest of alcohol problems, because only a major committment to reducing these problems will pay dividends. I realize you want to balance the budget, and I realize that other special interest groups are tugging at the purse strings. But, we have waited long enough. I urge you to significantly increase the funds for alcohol research and training, and for other ADAMHA programs which are interfaced with alcohol problems. Don't wait until the disease strikes you or a member of your family before you become emotionally involved in these problems.

Thank you for your attention.

STATEMENT OF JAMES HOWE, PRESIDENT, NATIONAL ALLIANCE FOR THE MENTALLY ILL

ACCOMPANIED BY NANCY DOMENICI, MEMBER, NATIONAL ALLIANCE FOR THE MENTALLY ILL

Senator BURDICK. Our next witness is James Howe, president of the National Alliance for the Mentally Ill.

Mr. HOWE. Senator Burdick, if I may, I would like to ask Nancy Domenici to come to the table with me. She is a very valued member of the National Alliance for the Mentally Ill.

Senator BURDICK. I know all about her work, and I am only too pleased to have her here.

Mr. HOWE. Thank you, Mr. Chairman.

My name is James Howe, and the father of four children, two of whom have the diagnosis of schizophrenia. I am also the president of the National Alliance for the Mentally Ill. I would like to begin by thanking the committee, you, Mr. Chairman, and this committee, for the work that you have done in the recent past on behalf of our fellow citizens who are mentally ill. Your increase last year in the budget of $22 million for research in this disease, and Dick Greer, who used to work for you, tells me that you have taken time to make yourself acquainted with a number of the issues that we do work on. The whole NAMI movement is grateful.

The NAMI movement consists, for the most part, of families, also consumers of mental health services, and some providers. It is reminiscent in many ways of the Association for Retarded Citizens. It has been characterized as one of the most important developments in mental health in the past 25 years, alongside some of the discoveries that have been made about the brain.

The growth rate has been rather spectacular. Two years ago, we have 120 affiliates throughout the United States. Today we have 420 affiliates, including one in North Dakota. We are adding a new affiliate at the rate of one every 1½ working days. We have between 40,000 and 50,000 individuals who belong, and that number has doubled in less than the past 2 years. At this rate, everybody in the United States presumably will belong to our movement.

Why such growth, you might ask yourself, after the family has hidden this disease in the closet for hundreds of years. Why is it that in the past 5 years they have suddenly come out of the closet and come out in a cascade of people.

I think that it is the march of science that has done this. What it has told us is that we are dealing here with a series of brain diseases. It is not that the devil has occupied our soul, which used to be the favorite theory. It is not that we have bad mothers, a theory that is still in the process of dying. It is not that we have toxic families. It is that we have brain diseases. It is a disease like diabetes, like epilepsy, like heart disease. So people are pouring out of the closet and they are forming a powerful voice of advocacy. Their first and primary target of advocacy is more research, research to find out the causes and the cures, and better treatment for these diseases.

We would like to see Federal research on these diseases as big as it is for heart disease, and why not. There are more beds that are occupied in this country by people with serious mental illnesses, schizophrenia and the depressions, than by heart disease, cancer, and lung diseases, for that matter, all combined.

The brain, which is our most important human organ, has become the newest frontier for research. Ten million Americans suffer from these diseases. So we support the expansion of this program to $252.8 million, and $24 million for research training. We would also like to insist that NIMH focus even more than it does now on serious mental illnesses. We know the pressures and the temptations to pursue interesting questions of human behavior, but our strong view is that we should put first things first, serious, disabling mental illnesses biomedical research, and we ask this committee to let NIMH know that this is your priority, too.

Finally, Mr. Chairman, I would like to talk about the Community Support Program for just 1 minute. Every year, the administration tries to kill this program, and every year the Congress very wisely responds by increasing this program. This small program is changing the intellectual landscape within the entire psychiatric community in this country. It has introduced the revolutionary idea that the mentally ill can live successfully in the community with a good system of support. Only a good system of support can solve the cruel problem of the mentally ill homeless.

In State after State, we see approximately 70 percent of the mental health budget devoted to caring for between 1 and 10 percent of the mentally ill people in centralized institutions, in hospitals. We want good hospital care, but we think that that budget distribution is out of proportion.

We see intrenched bureaucracies in these States defending that status quo. The CSP, in my opinion, demonstrated uncommonly good common sense when they went for the jugular by saying, let's help educate a constituency that will fight for a community-based support program for these people. They are educating consumers, families, and the providers to see the potential of a community-based support system.

A whole advocacy movement is growing up throughout the country and it is changing the way that citizens, families, consumers, providers, and politicians, and budgeteers, even, are looking at this problem. So we support the expansion of this program to $20 million.

PREPARED STATEMENT

Thank you, Mr. Chairman. That ends my statement, and I would like to have my written statement included in the record. Also, Mr. Chairman, if I may, there is a statement of recommendations of a coalition of 27 organizations that are concerned about this which I would like to submit.

Senator BURDICK. They will be received.

[The statement follows:]

Statement of James Howe

This statement represents the views of the National Alliance for the Mentally Ill. The Alliance, formed in 1979, consists of family members of mentally ill persons as well as mentally ill persons themselves. And the illness in NAMI is severe, delibitating, disabling mental illness---the schizophrenias and the depressions, including manic depresssion.

NAMI is composed of self-help groups whose members have come out of the closet to advocate for the seriously mentally ill who, in most instances, are unable to speak on their own behalf. AMI groups provide mutual emotional support to each other and to families struggling with these ancient and dreaded diseases. We support and educate each other in coping and managing the effects of the illness of the mentally sick relative and its impact on the total family.

NAMI's affiliates number 425, a tripling of such groups in the past two years. Now present in all 50 states, our phenomenal growth has reached a family membership of 30,000. We have become truly a nationwide movement whose purposes are no less than to redress the nation's past neglect of seriously mentally ill persons. We are committed to a thoroughgoing system of change that will achieve an adequate continuum of care in every state and in every community large enough to warrant it. Such a system of care will assist mentally ill persons to achieve their highest level of independence and self-care.

We are pleased to have the opportunity to offer our views of the President's budget request for ADAMHA particularly NIMH and the ADM block grant. My testimony addresses seven topics.

1. The NIHM research program. Significant increases in this program is our organization's highest goal. Our membership called upon Congress, in a resolution adopted at our national conference last summer, to dramatically increase funding for the NIMH research program, to launch a war on mental illness.

We thank this subcommittee and its chairman for its leadership in increasing last year's NIMH research budget by some $22 million in the face of a stand-still budget request from the President. We are saddened that once again the President has turned aside our urgent plea. For FY 1986 he proposes to actually reduce funding over 1985 levels.

Twenty seven organizations associated with mental health and the addictive disorders have joined together to ask you to appropriate $252.8 million for FY 1986. A consensus is clearly emerging that it's time the federal government stop the penny ante approach to mental illness, and match resources with the problem nationally and with the opportunities scientifically.

There is a consensus that we have a vast national problem in providing a minimum level of care for mentally ill citizens, a consensus dramatized by the steadily rising numbers of mentally ill homeless people. It is abetted by awareness that the federal investment in research on the causes and treatment of mental illness is an appalling mismatch of meagre resources against a sick population numbering in the millions. It is also abetted by the excitement in the scientific community that science is on the threshhold of remarkable discoveries of the brain that will surely unravel the puzzle of mental illness.

The recent report of the Institute of Medicine (IOM) on Research on Mental Illness and Addictive Disorders: Progress and Prospects put the case for action now in appropriate perspective. It emphasizes that mental illness and the addictive disorders "already account for a large and steadily increasing portion of the total burden of illness in the United States, whether the index used is mortality, morbidity, human suffering, or economic cost."

The IOM study says the research opportunities are there. The research tools and conceptual frameworks needed as a foundation for finding solution are available. But, alas, the funding is a trickle. The IOM study reminds us that, unlike private philanthropy for other severe illnesses such as cancer, very few dollars are given privately for research on mental illness. The inescapable conclusions is that, in the main, whatever advances are to be achieved will only come about with federal appropriated dollars.

The IOM study says that Congress provided NIMH research funds of $100 million in 1966. That figure would have been $307 million in 1983 had it been indexed for inflation. That spells a policy of national disinvestment of the NIHM research policy these past 15 or so years. Hard to believe, but true. The President's 1986 budget request continues this bad policy.

We would go further than the IOM study which recommends a doubling of the NIMH research effort over the next few years. We hope the Congress will wake up and start a war on mental illness that will reach a half-billion dollar research pool by 1989.

A few short weeks ago, Senator Pete Domenici expressed his deep concern before this subcommittee. He expressed "very serious and growing concern about our country's efforts in terms of the serious mental illnesses." He added these remarks:

> Serious mental illness in our country is probably doing more harm and costing more money, and having more of an effect on families and individuals than many of the diseases that we put front and center, even...cancer. ...I

> am one who has looked to cut the deficit. But, clearly, I don't see any area that we ought to do more in--and that we have done less in--in terms of the relative importance and relative seriousness of the problem as in the whole area of mental illness. It is not an area that I am going to be interested in balancing the budget on, I assure you. (Emphasis added.)

These words take on added meaning, of course, when we are aware that they were spoken by the chairman of the U.S. Senate Budget Committee and a member of this appropriations subcommittee.

Finally, it is NAMI's strongly held view that NIMH should continue to move in the direction of giving top priority to the most serious forms of mental illness. The importance of specific diagnosis cannot be too strongly emphasized. As in other areas of medicine, sound research and appropriate treatment are impossible without precise diagnosis. One cannot determine etiology without such specificity. And without some knowledge of etiology, prevention efforts are either grossly inefficient or impossible.

2. Research Training. We believe this subcommittee ought to increase the administration's research training budget to at least $24 million, a six million dollar incease over 1983 and commeasurate with the requested increase in the research budget.

Senator Domenici also expressed concern about researchers entering the field. "We have to stimulate in our country some genuine interest on the part of the talent in this country to get involved (in research on mental illness)", he said. Our curtailed efforts, he believes, have not provided the stimulus for "talented people coming out of our medical schools and the Ph.D's." The IOM study cited above spells out why the Senator's views are correct.

3. Community Support Program. We have in recent years testified each year to this subcommittee that the modest investment in the CSP program has galvanized achievements far beyond expectations. In many states it became a burr under the bureaucratic saddle to get some thinking and planning and action started toward developing a system of care for the chronically mentally ill in the community. We are a long way in most states from achieving that goal--a support system that will sustain mentally ill persons in the community rather than on the streets or in some expensive institutional setting with no more to offer than simple maintenance of the person and his/her illness.

Once again the President's budget would eliminate CSP as a federal initiative. It is argued that the states are free to continue CSP efforts out of the ADM block grant or other state sources.

Again we cite Senator Domenici who thinks this small program is "an excellent experiment...on the part of the national government." He would not "cut back on programs like CSP." Will the states pick up the program if the federal government drops it? Domenici doesn't think so because they are going to be so "hard-pressed" because of other cut backs affecting them. Senator Domenici thinks CSP "ought to be built on..not reduced."

NAMI, joined by a host of other national organizations, asks that the 1985 demonstration authority added as an amendment to the ADM block grant be fully funded at $20 million. These funds will continue the CSP program in 34 states, will continue funding of the children and adolescent CSP initiative, and will initiate $1.5 million to plan and start statewide services demonstrations for the elderly mentally ill.

4. State Planning. The recent ADM block grant amendments provided for an optional state mental health planning process designed to cut across agencies whose present programs ought to be part of a system of community care for the mentally ill but are too often uncoordinated and without focus. In FY 1985 Congress provided $2.5 million for planning grants. NIMH received 34 applications, indicating widespread interest in a new type of planning that will involve the governor, an appointed planning council that will include knowledgeable consumers as well as key agency administrators.

We ask that the full $5 million be provided. We think it is necessary because the greatest portion of most state mental health budgets are expanded on the operation and maintenance of the state hospital. Yet a small percentage of mentally sick persons are served with these dollars. Typically more than two-thirds of each appropriated dollar goes to support state institutions. It is time for some fresh thinking. It is time for governors and legislators to take a hard look at their present mental health systems, many of which are 100 years old and out of date. These modest planning grant funds can get some fresh thinking underway with the help of activist consumers. This is a vital first step in reforming and redirecting the system.

5. ADM block grant. The Congress reauthorized the block grant for three years and increased its authorization for FY 1986 to $545 million. NAMI has joined the Citizens Coaliton for Developmental Disabilities and the Mental Health Liaison Group in requesting $545 million to accommodate increasingly significant demands. First among these demands is action to do something about intervention services for the nation's homeless mentally ill. This should include outreach services to locate this population both in the streets and in shelters, aggressive case management services to obtain entitlements, drop-in centers to initiate contacts with this hard-to-serve population, and linkage's between existing service resources and the homeless population found in shelters.

The President's request of $490 million would result in a decrease of $21.6 million (using the Congressional Budget Office factor of 4.4% for inflation) in the purchasing power for existing services. Such a reduction is all the more pity since the community mental health centers in the nation are devoting more attention and resources to the chronically mentally ill--far short of the need but an improvement over two or three years ago.

6. Clinical training. Although the President has sought to eliminate this program in the past Congress continues to fund it. For FY 1986, NAMI joins other mental health organizations in requesting that $26 million be provided for clinical training.

We ask this subcommittee, however, to clarify that the purpose of clinical training should be to target limited funds to critical areas of need. We ask that the subcommittee refocus this program so that NIMH pays special attention to appropriate training of mental health professionals to treat seriously and chronically mentally ill adults in community settings. Many mental health professionals have little or no exposure to such patients and no experience with appropriation rehabilitation-oriented approaches to the treatment of serious mental illness.

7. NIMH staffing. Once again the OMB would reduce the NIMH staff. We have the spectacle of the mentally ill homeless people on our television screens nightly while the federal government reduces its people investment in the care and treatment of the mentally ill. This subcommittee stopped an administration directed RIF last year. We ask that you resist these efforts again this year.

In closing, NAMI wishes to express its solid appreciation for the leadership this subcommittee has provided in mental health/mental illness on the federal agenda, notwithstanding pressures to reduce the federal investment in this area. We say a special thanks to the chairman for insisting that the federal government invest now in greater biomedical research efforts and for his leadership for the handicapped mentally ill through the efforts of his Handicapped Subcommittee.

Senator BURDICK. You have used up your time, you know, but I would like to grant 30 seconds to Mrs. Domenici, if she has anything to say.

Mrs. DOMENICI. Senator Burdick, I am just shaking my head over every statement that Mr. Howe made on behalf of all the members of NAMI, and those chronically ill people out there who need so much more help. Thank you for listening to us today.

Senator BURDICK. Thank you very much.

STATEMENT OF STANLEY E. FISHER, SECRETARY-TREASURER, NATIONAL FETAL ALCOHOL SYNDROME STUDY GROUP, RESEARCH SOCIETY ON ALCOHOLISM

Senator BURDICK. Our next witness will be Stanley Fisher secretary-treasurer, National Fetal Alcohol Syndrome Study Group, Research Society on Alcoholism.

Mr. FISHER. Thank you, Mr. Chairman.

My name is Stanley E. Fisher. I am associate professor of pediatrics at Cornell University Medical College, and head of the pediatric gastoenterological research at the North Shore University Hospital in Manhasset, NY. Much of my research is in the area of the effects of alcohol and other toxic substances upon fetal development. I am representing the Research Society on Alcoholism, and the National Fetal Alcohol Study Group.

Alcohol and drug related illnesses cost this country 10 of billions of dollars each year. This tremendous expense includes everything from property damage to hospital, doctor, nursing-home care, education, and rehabilitation costs. No small part of the alcohol-related medical costs are those which apply to the effects of alcohol on the newborn child.

Alcohol is a toxic drug which readily crosses from the mother's blood stream into that of the growing fetus. In essence, alcohol poisons the developing fetus. It can disfigure facial features, severely retard body growth, cause numerous congenital anomalies, including heart defects, and most frequently cause moderate to severe mental retardation.

When several of these abnormalities are present at the same time, we call it the fetal alcohol syndrome. The fetal alcohol syndrome, however, is just the tip of the iceberg. Less profound effects of alcohol use and abuse during pregnancy are far more frequent. These effects are usually manifested by intrauterine growth deficiency and/or mental retardation.

In short, according to the New England Journal of Medicine, May 11, 1978:

> Recent studies place the frequency—of the fetal alcohol syndrome—at between 1 and 2 live births per 1,000, with the frequency of partial expression at perhaps 3 to 5 live births per 1,000. The adverse effect of material ethanol use appears to be the most frequent known teratogenic cause of mental deficiency in the Western World.

The effect of mild to moderate maternal alcohol use is an area of vigorous ongoing research. It should be noted that a young woman may not know that she is pregnant, at a time when she partakes of alcohol. While progress is being made, the question remains unanswered—how much, if any, alcohol is safe during pregnancy?

Research is underway to identify the dose of alcohol at which fetal damage occurs. Additional studies are trying to pinpoint the time during pregnancy at which alcohol does the greatest fetal damage, and to understand the mechanisms by which alcohol causes injury.

Major efforts are underway to use the results of basic research to educate women of childbearing age and, more importantly, to uncover measures by which the fetal alcohol effects can actually be prevented. For example, promising results from two different laboratories have shown that medication can prevent certain types of alcohol-related fetal injury in animals.

Finally, studies designed to find out how best to help those already afflicted by the effects of fetal alcohol exposure have given us great insight into the problem. In addition to those children who are grossly retarded, many more suffer mild mental handicaps.

Specifically, fetal alcohol exposure frequently causes learning deficits and/or low-grade retardation. Needness to say, the mental handicap effects of fetal alcohol exposure pose a great emotional and financial burden to individual families and to society as a whole.

In pursuit of alleviating this burden, basic laboratory, educational, psychological, and social research projects are actively searching for solutions to many unanswered questions, particularly aimed at prevention of brain injury due to fetal alcohol exposure.

Just as Congress has just recently paid attention to the plight of the institutionalized mentally handicapped, I submit that Congress should be at least equally concerned about preserving and improving programs of research aimed at preventing a major cause of mental handicap, namely, the fetal alcohol syndrome and fetal exposure.

Unfortunately, the administration's budget proposal, coupled with cutbacks proposed by the Office of Management and Budget, would result in a number of alcohol research projects to be funded by the National Institute on Alcohol Abuse and Alcoholism.

Even if the OMB cutbacks are eliminated, the administration's proposal for funding of NIAAA research is only one-half of that recommended by the Institute of Medicine. The current proposed levels, excluding the OMB restrictions, are only 1.1 percent of the total research moneys appropriated for the NIH and ADAMHA.

At current levels, the NIAAA would again be unable to fund promising researchers through the Research Scientist Development Award Program. If the OMB reductions in new and competing grants are allowed, less than 28 percent of approved, meritorious NIAAA research grants could be funded.

I firmly believe that alcohol-related research is making significant headway in the treatment and prevention of the effects of alcohol use and abuse. This is particularly true in the field of alcohol and fetal development. The clear divident from this research will be lowered costs to our Nation through a reduction in the extent of alcohol-related diseases.

Therefore, my colleagues in the Research Society on Alcoholism and I urge this subcommittee, and the full Committee on Appropriations, to recommend budget appropriations which increase, rather than decrease, the number of NIAAA research grants over the next 2 to 3 years.

Thank you.

PREPARED STATEMENT

Senator BURDICK. Thank you very much. Your statement will be placed in the record.

[The statement follows:]

STATEMENT OF STANLEY E. FISHER

My name is Stanley E. Fisher. I am Associate Professor of Pediatrics, Cornell University Medical College and Head of Pediatric Gastroenterological Research at the North Shore University Hospital Manhasset, New York. Much of my research is in the area of the effects of alcohol and other toxic substances upon fetal development. I am representing the Research Society on Alcoholism and the National Fetal Alcohol Syndrome Study Group.

Alcohol and drug related illnesses cost this country tens of billions of dollars each year. This tremendous expense includes everything from property damage to hospital, doctor, nursing-home care, education and rehabilitation costs. No small part of the alcohol-related medical costs are those which apply to the effects of alcohol on the newborn child. Alcohol is a toxic drug which readily crosses from the mother's blood stream into that of the growing fetus. In essence, alcohol poisons the developing fetus. It can disfigure facial features, severely retard body growth, cause numerous congenital anomalies, including heart defects, and, most frequently, cause moderate to severe mental retardation. When several of these abnormalities are presentat the same time, we call it the Fetal Alcohol Syndrome. The Fetal Alcohol Syndrome, however, is just the tip of the iceberg. Less profound effects of alcohol use and abuse during pregnancy are far more frequent. These effects are usually manifested by intrauterine growth deficiency and/or mental retardation. In short, according to the New England Journal of Medicine, May 11, 1978, "Recent studies place the frequency (of the Fetal Alcohol Syndrome) at between 1 and 2 live births per thousand, with the frequency of partial expression at perhaps 3 to 5 live births per thousand...(The adverse effect of maternal ethanol use) appears to be the most frequent known teratogenic cause of mental deficiency in the western world."

The effect of mild to moderate maternal alcohol use is an area of vigorous ongoing research. It should be noted that a young woman may not know that she is pregnant, at a time when she partakes of alcohol. While progress is being made, the question remains unanswered: How much, if any, alcohol is safe during pregnancy? Research is underway to identify the dose of alcohol at which fetal damage occurs. Additional studies are trying to pinpoint the time during pregnancy at which alcohol does the greatest fetal damage and to understand the mechanisms by which alcohol causes injury. Major efforts are underway to use the results of basic research to educate women of child bearing age, and, more importantly, to uncover medical measures by which the fetal alcohol effects can actually be prevented. For example, promising results from two different laboratories have shown that medications can prevent certain types of alcohol-related fetal injury in animals.

Finally, studies designed to find out how best to help those already afflicted by the effects of fetal alcohol exposure have given us great insight into the problem. In addition to those children who are grossly retarded, many more suffer mild mental handicaps. Specifically, fetal alcohol exposure freqently causes learning deficits and/or low-grade retardation. Needless-to-say, the mental handicap effects of fetal alcohol exposure pose a great emotional and financial burden to individual families and to society as a whole. In pursuit of alleviating this burden, basic laboratory, educational, psychological and social research projects are actively searching for solutions to many unanswered questions, particularly aimed at prevention of brain injury due to fetal alcohol exposure.

Just as Congress has recently paid attention to the plight of the institutionalized mentally handicapped, I submit that Congress should be at least equally concerned about preserving and improving programs of research aimed at preventing a major cause of mental handicap, namely, fetal alcohol exposure. Unfortunately, the Administration's budget proposal, coupled with cutbacks proposed by the Office of Management and Budget, would result in a reduction in the number of alcohol research projects to be funded by the National Institute on Alcohol Abuse and Alcoholism.

Even if the OMB cutbacks are eliminated, the Administration's proposed funding of NIAAA research is only half of that recommended by the Institute of Medicine (report on Research on Mental Illness and Addictive Disorders, October 1984). The current proposed levels, excluding OMB restrictions, are only 1.1% of the total research monies appropriated for the NIH and ADAMHA. At current levels, the NIAAA would again be unable to fund promising researchers through the Research Scientist Development Award program. If the OMB reductions in new and competing grants are allowed, less than 28% of approved, meritorous NIAAA research grants could be funded. Furthermore, the OMB reduction order comes at a time when research expenses have risen. In short, the OMB restrictions would deal a severe blow to NIAAA plans to effectively pursue solutions to the massive financial burden of alcohol-related medical expenses.

I firmly believe that alcohol-related research is making significant headway in the treatment and prevention of the effects of alcohol use and abuse. This is particularly true in the field of alcohol and fetal development. The clear dividend from this research is lowered costs to our nation through a reduction in the extent of alcohol-related diseases. Therefore, my colleagues in the Research Society on Alcoholism and I urge this subcommittee, and the full Committee on Appropriations, to recommend budget appropriations which increase, rather than decrease, the number of NIAAA research grants over the next 2 to 3 years.

Thank you.

STATEMENT OF JACK D. BARCHAS, M.D., CHAIRMAN, BOARD ON MENTAL HEALTH AND BEHAVIORAL MEDICINE

Senator BURDICK. Jack D. Barchas, M.D., chairman of the Board on Mental Health and Behavioral Medicine.

Welcome to the committee, Doctor.

Dr. BARCHAS. Mr. Chairman, I am speaking on behalf of the Board of Mental Health and Behavioral Medicine of the Institute of Medicine.

The Institute of Medicine was asked by the administration to prepare a report evaluating the current state of knowledge, the prospects and the opportunities for research related to the ADAMHA mandate. The Institute of Medicine turned this request over to its Board on Mental Health and Behavioral Medicine, and I am here in my capacity as chair of that board. The report was prepared and distributed relatively recently.

The report represents the knowledgeable views of hundreds of scientists, educators, physicians, people concerned with various aspects of the ADAMHA mandate. After the report was prepared through our board, it went through the careful review processes that are involved in all Institute of Medicine reports, being reviewed by persons uninvolved in its preparation, and representing other scholarly areas.

The report highlights the need for an increased national commitment in these areas. It is clear that ADAMHA deals with real illnesses that are serious. We have 300,000 new cases of schizophrenia, and episodes of schizophrenia a year in this country. We have 10 million people with depression at any given time. We have 10 million people with severe anxiety. We have roughly 10 million adults with problems of alcohol as you have been hearing about this morning. We have another 3 million children and adolescents with problems of alcoholism. We have millions of people who abuse drugs.

It has been demonstrated that the costs in terms of direct health care expenditures are about $20 billion a year, and the indirect costs are about $185 billion a year.

We believe that there are outstanding opportunities in the biological, psychological, and social science areas in terms of research. However, despite the opportunity, and despite the need, the support for research is shockingly low. The NIMH budget is one-half of what it was in real dollars compared to 1966, and it wasn't very much then.

The NIH has kept pace with inflation, but NIMH has not. The Institute of Medicine very rarely recommends numbers in its reports, but in this instance it recommended that NIMH be at $300 million, NIDA at $100 million, and NIAAA at $100 million. These are conservative amounts. There are particularly pressing needs in terms of children, in terms of facilities and equipment, in terms of research centers. We believe that it is important that the Congress ask the ADAMHA Institute to develop a plan for how they would use these amounts of funds. The board believes that the Institute should be able to give you information that will be exciting, important, and relevant.

The ultimate stigma in relation to the mentally ill and those with addictive disorders is the failure to fund.

Thank you for permitting me this time.

PREPARED STATEMENT

Senator BURDICK. Thank you very much. We will insert your statement in the record.

[The statement follows:]

STATEMENT OF DR. JACK D. BARCHAS

Mr. Chairman, other members of the Committee, and staff. I speak to you today in my capacity as the Chair of the Board on Mental Health and Behavioral Medicine of the Institute of Medicine. A component of the National Academy of Sciences, the Institute of Medicine holds a unique position in American society as an observer of national health policy and a source of independent, objective advice on health-related issues. Several years ago the Administrator of the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) asked the Institute of Medicine to evaluate the current state of knowledge and research opportunities in fields relevant to the National Institute of Mental Health, the National Institute on Drug Abuse, and the National Institute on Alcohol Abuse and Alcoholism.

The Institute of Medicine asked our Board to prepare a response to that request. In doing so, the Board sought advice from experts from a broad range of disciplines relevant to mental and addictive disorders. Over 250 educators, researchers, and practitioners graciously provided information. Before its release, the document underwent the vigorous review to which all National Academy of Science studies are subjected: people uninvolved in the effort and representing disciplines unrelated to its content scrutinized the document for accuracy to ensure that its conclusions and recommendations were supported by available facts and reasoned judgment.

The resulting report, Research on Mental Illness and Addictive Disorders: Progress and Prospects, which was released in October, 1984, highlights the need for a thorough reassessment of and a greatly increased national commitment to research on mental and addictive disorders. It also calls for almost a doubling of the ADAMHA research budget to $500 million a year, in constant 1983 dollars within five years after the submission of the report in 1984. Support for its recommendation arises from several observations.

First, in the United States, personal and social costs of these disorders resemble those for other major illnesses such as cardiovascular disease and cancer. For example, 15 to 22.5% of the population has some form of mental or addictive disorders: this year, 300,000 people will experience the often devastating effects of a schizophrenic episode, 9 to 16 million lives will be impaired with depression, 10 million will suffer from generalized anxiety, 13 million will abuse alcohol, and additional millions will abuse drugs. The staggering costs to society of these disorders include $20 billion for personal health care costs alone, with a total drain on this nation's economy of over $185 billion per year.

Second, highly promising research opportunities exist for elucidating causes of mental and addictive disorders and for identifying better ways to prevent, diagnose, and treat them. The scope and breadth of research opportunities continue to expand rapidly in the biological, psychological, and social sciences. Indeed, a key conclusion of the report was that continued research is vital in each of the basic science and clinical areas. Biological research now is clearly in a highly visible and very productive phase, but important developments in psychosocial areas underscore the necessity of supporting good research in those fields and in interdisciplinary areas. Fortunately, in many fields related to mental illness and addictive disorders, a cadre of talented scientists and clinical researchers already exist, eager to undertake the research needed so desperately.

Third, support for research on mental and addictive disorders has never achieved a reasonable level, even compared with research support for comparably costly disorders within the domain of the National Institutes of Health (NIH). Of particular concern is the decline in recent years in real purchasing power of federal research allocations on mental and addictive disorders. For example since 1966, inflation-adjusted research allocations for NIMH have decreased by about half. This decline is not a result of an overall deemphasis on research, for allocations to the NIH generally have at least kept pace with inflation. Nor is it a product of any single administration or Congress--Democratic or Republican. Whatever its cause, it is having adverse effects, even by such a crude measure as the number of grants funded. Even research in an area that is universally viewed as important and especially exciting, for example, that supported by the NIMH Neurosciences Research Branch, is severely handicapped.

The chronicity of the problem is reflected in the existence of few research centers with a critical mass of investigators studying mental health and addictive disorders; its severity can be seen in the research funding problems of even the most outstanding programs.

The report set a minimum target goal for federal research allocations. That call, unusual in Institute of Medicine reports, reflects the perceived severity of the situation and the relative conservativeness of the recommended increase--in essence catching up with inflationary effects over the last two decades. In constant 1983 dollars, recommended amounts are as follows: the National Institute of Mental Health, $300 million; the National Institute on Drug Abuse, $100 million; and the National Institute on Alcohol Abuse and Alcoholism, $100 million. During our intensive review of the area, I and many others involved with the report came to believe that these amounts should be considerably higher, to take full advantage of the new research opportunities; this view also is reflected in the report. Funding increases must and should be made over several years, particularly with the country's present financial difficulties. Still, they are essential capital investments in relation to the illnesses and the problems that they cause.

Within the problems of concern to ADAMHA, some stand out as especially deserving of greater attention. For example, remarkably little research is being done on mental disorders of children and adolescents. Similarly, alcohol research remains seriously underfunded, despite encouraging increases over the past few years. Support for research training will be an important component for these two areas. More generally, investments are needed in equipment and facilities to enable investigators in the field to take advantage of current technology. The mental health clinical research centers are an important development in mental health research that merit continued support and expansion.

The report documents the problems--and prospects--for research on mental and addictive disorders. It also suggests that ADAMHA and its institutes take this opportunity to reevaluate its research portfolios and consider how best to invest its allocations. However, it is clear that no reordering of priorities can compensate for the years of neglect and misunderstanding that have so hurt the field. Addressing that problem will require expanded research support. Perhaps the ultimate stigma for those with mental and addictive disorders has been the failure to appropriately fund research dealing with their problems.

Thank you for offering me the opportunity to present these findings to your committee.

Senator BURDICK. The subcommittee will be in recess for 10 or 15 minutes.

[A brief recess was taken.]

STATEMENT OF JEROME SINGER, PROFESSOR AND CHAIR OF THE GRADUATE DEPARTMENT OF PSYCHOLOGY, YALE UNIVERSITY, ON BEHALF OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Senator WEICKER [presiding]. The next witness is Dr. Jerome Singer, American Psychological Association.

Dr. SINGER. I am Dr. Jerome Singer, professor and chair of the graduate department of psychology at Yale University. I am pleased to testify on behalf of the alcohol, drug abuse, and mental health appropriations.

The funding levels for ADAMHA we propose are supported by a coalition of 27 groups, representing psychiatry, nursing, community mental health centers, mental health consumer advocates, State mental health program directors, and many others.

We urge the committee to increase NIMH research support from the fiscal year 1985 level of $196.2 million to $252.8 million in fiscal year 1986. The administration has proposed decreasing support to $190.2 million in fiscal year 1986. Our recommendation is in keeping with the Institute of Medicine's conclusions that NIMH support be increased to $300 million by 1989. This is the Institute's conservative estimate of the support required to address the massive mental health problems we confront.

Similar increases are recommended for research support at NIDA and NIAAA, and we urge the Congress to increase funding of NIDA research from $64.6 million in fiscal year 1985 to $79.6 million in fiscal year 1986, and NIAAA research from $49 million in fiscal year 1985 to $68.7 million in fiscal year 1986.

The Institute of Medicine conservatively estimates that mental disorders, alcoholism, and drug addictions profoundly affect 30 to 40 million people in the United States each year, and that the overall monetary impact is $185 billion per year. Direct health costs are estimated to be $20 billion per year.

Exciting new breakthroughs in research into the behavioral, social, and biological aspects of mental and addictive disorders and their causes, assessment, and treatment are encouraging, but continued success is hindered by lack of funds. For example, NIMH supports research on AIDS that may provide important information on the interconnections between the brain and the immune system. There is valuable behavioral research on eating disorders that affect about 2 percent of young women. But additional information is needed about etiology, treatment, and prevention.

Last year, recognizing that existing research opportunities could be lost forever if unfunded, this committee and the Congress called for 352 awards in fiscal year 1985. The administration is attempting to circumvent this initiative through a forward-funding proposal. If successful, only 277 new research grants would be funded in fiscal year 1985. The impact of this proposal on NIMH is much greater than on NIH, because the overall number of awards at NIMH is small. We ask the Congress to reverse the forward-funding directive for all agencies for fiscal year 1985 and to insure that fiscal year 1986 appropriated dollars are both awarded and spent in fiscal year 1986.

We recommend that the Congress appropriate $24.1 million in support for research training at NIMH, $6.1 million over the fiscal year 1985 level. Research training support at NIMH has declined dramatically in the last decade. The proposed budget for fiscal year 1986 would freeze the level of funding at $18 million. The number of trainees has dropped from 1,352 in fiscal year 1980 to about 878 this year.

In an earlier 1983 report on the personnel needs for biomedical and behavioral research, the Institute of Medicine advocated increased Federal support for behavioral science research training. It specifically recommended increased support for training at the predoctoral level in behavioral research. Last year, this committee acknowledged and encouraged this approach in report language. Yet, despite that report language, and despite subsequent requests by the subcommittee, there has been no discernable action on this issue by NIMH.

We ask that Congress renew its request that NIMH increase predoctoral support in the behavioral sciences.

We advocate increasing the NIDA research training budget to $1.6 million, and increasing the NIAAA funding level to $2.7 million. We support funding the NIMH clinical training program at $26 million for fiscal year 1986. This committee has recognized the need for training medical health professionals who work in shortage areas and among underserved populations. In preserving the program, Congress has highlighted the needs of such populations as the elderly, children, minorities, the chronically mentally ill, those in jails, and those in rural areas. We urge Congress to appropriate $1 million for clinical training at NIDA and NIAAA.

We thank this committee for its past support of the Minority Fellowship Program, and we ask for continued support. We urge Congress to support the ADM block grant at $545 million, and we recommend that

Congress fund the new services demonstration grants in connection with the highly successful Community Support Program which in the last year was expanded by Congress.

Thank you, Mr. Chairman, for this opportunity to testify.

Senator WEICKER. Thank you, Dr. Singer.

We are in the process of trying to work out matters, both as to grants and as to some of the other issues that you presented to us.

John Doyle, where do we stand on some of the matters that Dr. Singer has raised?

Mr. DOYLE. As far as clinical training and training services, they will remain whole in 1986. In terms of the grants themselves, there will be a compromise considerably better than the administration proposal.

Dr. SINGER. Thank you.

Senator WEICKER. I think we all recognize in some ways that NIMH, ADAMHA, et cetera, may not have kept pace as they should. I think we all understand the increasing importance of the work being done here.

I know that we have already heard from Mrs. Domenici, but both Senator Domenici, on my subcommittee, feels very strongly about this issue. I think that we will work things out in the way that they should be worked out. It is not a question of who wants what, it is a question of what needs to be done, it is as simple as that.

Dr. SINGER. Senator, we know the efforts that you have gone through in this regard and we appreciate it very much.

PREPARED STATEMENT

Senator WEICKER. Thank you very much for your testimony. It will be inserted in the record.

Dr. SINGER. Thank you.

[The statement follows:]

STATEMENT OF DR. JEROME SINGER

I am Dr. Jerome Singer, professor and Chair of the Graduate Department of Psychology at Yale University. I am pleased to testify today on the subject of Alcohol, Drug Abuse, and Mental Health Appropriations--representing the 76,000 members of the American Psychological Association (APA).

The funding levels for ADAMHA we propose are supported by a coalition of 27 groups, representing psychiatry, nursing, community mental health centers, mental health consumer advocates, state mental health program directors and many others. These groups coalesced as a result of the excitement generated by the recent release of the Institute Of Medicine Report, Research on Mental Illness and Addictive Disorders. This Report strongly recommends increased funding for programs in the ADAMHA domain. Thoughout our testimony, I will make reference to pertinent fundings of the Institute of Medicine Report.

Research

We urge the Committee to increase NIMH Research support from the FY 85 level of $196.2 million to $252.8 million in FY 86. The Administration has proposed decreasing support to $190.2 million in FY 86. Our recommendation is in keeping with the Institute of Medicine's conclusion that NIMH support be increased to $300 million by 1989. This is the Institute's conservative estimate of the support required to address the massive mental health problems we confront. Similar increases are recommended for research support at NIDA and NIAAA, and we urge the Congress to increase funding of NIDA Research from $64.6 million in FY 85 to $79.6 million in FY 86, and NIAAA Research from $49 million in FY 85 to $68.7 million in FY 86.

The Institute of Medicine conservatively estimates that mental disorders, alcoholism, and drug addictions profoundly affect 30 to 45 million people in the United States each year, and that the overall monetary impact is $185 billion per year. Direct health costs are estimated to be $20 billion per year. Exciting new breakthroughs in research into the behavioral, social and biological aspects of mental and addictive disorders and their causes, assessment, and treatment are encouraging but continued success is hindered by lack of funds. For example, NIMH supports research on the Acquired Immune Deficiency Syndrome (AIDS) that may provide important information on the interconnections between the brain and the immune system. And, there is valuable behavioral research on eating disorders that affect about two percent of young women. But, additional information is needed about etiology, treatment and prevention.

The Institute of Medicine further substantiates the findings of the Surgeon General's Report, Healthy People, that 7 of the 10 leading causes of death in this country are in large part behaviorally determined. The IOM Report concludes that:

> The amount of research on the disorders and health-related behaviors in the ADAMHA domain is much too low, given their enormous costs to society. Since 1966, the real level of federal support was dropped markedly, even as research opportunities and available scientific personnel have expanded.

Inflation and program decreases have eroded the purchasing power of ADAMHA by almost half in the last ten years. Under our proposal, critical behavioral research can continue and important new research opportunities could be funded.

NIMH Forward Funding

Last year, recognizing that existing research opportunities could be lost forever if unfunded, this Committee and the Congress called for 352 awards in FY 85. The Administration is attempting to circumvent this initiative through a forward-funding proposal. If successful, only 277 new research grants would be funded in FY 85. The impact of this proposal on NIMH is much greater than on NIH, because the overall number of awards at NIMH is small. We ask the Congress to reverse the forward-funding directive for all agencies for FY 85 and to insure that FY 86-appropriated dollars are both awarded and spent in FY 86.

NIMH Research Training

We recommend that the Congress appropriate $24.1 million in support for Research Training at NIMH $6.1 million over the FY 85 level. Research training support at NIMH has declined dramatically in the last decade. The proposed budget for FY 86 would freeze the level of funding at $18 million. The number of trainees has dropped from 1,352 in FY 80 to about 878 this year.

In an earlier 1983 report on the personnel needs for Biomedical and Behavioral research, the Institute of Medicine advocated increased federal support for behavioral science research training. It specifically recommended increased support for training at the predoctoral level in behavioral research. Last year, this Committee acknowledged and encouraged this approach in report language. Yet, despite that report language, and despite subsequent requests by the subcommittee, there has been no discernable action on this issue by NIMH. We ask that Congress renew its request that NIMH increase predoctoral support in the behavioral sciences. In addition, we hope the subcommittee will require NIMH to formally explain why it failed to follow Congressional intent last year.

NIDA and NIAAA Research Training

We advocate increasing the NIDA research training budget from $1.5 million in FY 85 to $1.6 million in FY 86 and increasing the NIAAA funding level from $1.5

million in FY 85 to $2.7 million in FY 86. As noted by the Institute of Medicine, psychological and social research is beginning to yield needed information about the incidence, use patterns, associated behavioral changes, and long term mental and behavioral effects of drug use. Continued funding is required to further these efforts. Productive alcohol research is being conducted as well, and the Institute of Medicine urges that additional research be undertaken in a variety of areas, including understanding the nature of tolerance as a biological form of memory and the social ramifications of the alcohol-violence syndrome. Expansion of the research training program is required to meet these needs.

NIMH Clinical Training

We support funding the NIMH clinical training program at $26 million for FY 86. The Administration proposes to eliminate this program for the fourth consecutive year. This Committee has recognized the on-going critical need for training mental health professionals to work in shortage areas and among underserved populations. In preserving the program, Congress has highlighted the needs of such populations as the elderly, children, minorities, the chronically mentally ill, those in jails and those in rural areas.

The Institute of Medicine report underscores the need for continued support in these areas. At any given time, 15 percent of the population suffers from a serious mental disorder, but less than one third of these people will receive any form of treatment. There are 2 million children with serious mental disorders and another 8 to 10 million with developmental disabilities in need of treatment. A minimum of 10% of the over-65 population is in need of treatment and, though estimates vary, a large number of the homeless population throughout the country are in need of treatment. These findings are in keeping with NIMH estimates that there is a need for over 90,000 practitioners in each of the four mental health disciplines. Available information shows that there are 34,000 psychiatrists, 34,000 psychologists, 30,000 clinical social workers, and 6,000 psychiatic nurses with at least a master's degree. These numbers suggest that we are operating at about one-third capacity nationwide.

Geographic Maldistribution of professionals compounds the problem of overall shortages of professionals in unserved or underserved populations. The General Accounting Office (GAO) has found that "a higher proportion of psychologists and psychiatrists are clustered in several states and in large metropolitan areas." Some rural counties and catchment areas have no full-time psychologist or psychiatrist. However, available information indicates that where trainees obtain their education and related experience influences where they practice. The clinical training program can help to alleviate these problems.

We recommend that the limited dollars available be more specifically directed to addressing the most pressing needs. To this end, we urge Congress to mandate that a fixed percentage--such as 75%--of clinical training funds awarded to each profession be allocated through stipends that require the individual receiving support to work in a designated underserved area for one year for each year of NIMH support.

The problem of maldistribution of professionals would be addressed by expanded use of "payback" and could be further ameliorated by a more equitable distribution of the clinical training funds among the four core mental health professions. Psychology, nursing, and social work have historically taken greater advantage of the payback provision than psychiatry but have consistently received a disproportionately smaller part of the funds. From FY 80 through FY 83, psychiatry received at least 30% of the total funds, while psychology and social work received between 13% and 16%, and psychiatric nursing received about 10%. Despite the express language of both the House and Senate Appropriations Committees in the last three years, the funding balance among the four professions has not altered.

NIDA and NIAAA Clinical Training

NIDA and NIAAA clinical training funds were eliminated by the Administration in FY 82. Last year Congress authorized restoration of these programs. We urge the Congress to appropriate $1 million in support at each Institute. There is a dearth of trained professionals and training programs across the country to treat those with addictive disorders. The Institute of Medicine found that 10 million adults and 3 million children and adolescents abuse alcohol; that another 30 to 40 million people are affected directly or indirectly by someone abusing alcohol; and that a total of 12.5 million people abuse heroin, cocaine, and prescription drugs. The problems and the training needs are national in scope and federal commitment and support are needed.

Minority Fellowship Program

We want to thank the Congress and this Committee for its past support of the Minority Fellowship Program (MFP), and we ask for your continued support this year. Through the available funds and institutional cooperation, our MFP program has supported doctoral level trainees at an average cost of $4,200 per trainee (versus the $7,500 NIMH allocates). Thus, we are supporting 51 trainees in 1984 with funds that would otherwise support only 28. We are concerned that the level of grant support for our MFP may be significantly reduced in FY 86 through a programmatic reallocation of funds. However, we have received no official notice of any such action to date. At this point, we want to merely alert the Committee to what may be a serious problem. We are attempting to work with the Institute and Dr. Shevert Frazier to resolve this issue and will apprise this Committee of any developments.

The NIMH Reduction in Force (RIF)

Last year, an Administration proposed RIF was forestalled largely due to Congressional opposition. This year, the Administration proposal would reduce staff by 103 full-time equivalents FTEs in FY 86. NIMH proposes to achieve the reduction through attrition and by eliminating 23 slots in FY 86 from the clinical training and Services Demonstration (formerly (CSP) areas. If Congress continues to support these programs, the Administration plan would undermine the ability of NIMH to carry out its legislative mandate. We thank the committee for its efforts last year and urge the Congress to insure adequate staffing of these programs through legisistive action.

Alcohol, Drug Abuse, Mental Health (ADM) Block Grant

We urge Congress to increase support for the ADM Block Grant from the FY 85 level of $490 million to an FY 86 level of $545 million. The Administration proposes no increase for the Block Grant. The FY 85 funding level represents an actual reduction of about 35%, accounting for inflation, from the FY 81 level of $638 million. This decrease is disturbing since we know that large numbers of those in need of treatment are going without and that the demand for services is increasing. We know that large numbers of the homeless population are not receiving much needed substance abuse and mental health services and that, overall, more than two thirds of those with severe mental disorders are not receiving services.

Under the revised funding formula of last year, 25 states and the District of Columbia received no additional funds in FY 85. The set-asides for seriously disturbed children, other underserved populations and women suffering from substance abuse enacted last year are important to ensure that minimal services dollars are directed to these areas. However, the set-asides in addition to no increases in half the states in FY 85 dramatize how little the states can do to address a major shortage of services across populations barring a significant increase in FY 86 support.

Services Demonstrations and State Planning Grants

The highly successful Community Support Program (CSP) was expanded by the Congress last year to provide a broader range of services, research and demonstrations projects to populations in the greatest need. We recommend that the Congress fund the new Services Demonstration Grants at $20 million in FY 86 (the CSP program was funded at $10.5 million in FY 85). We believe that the new funds should be directed to local demonstration projects addressing the problems of the homeless mentally disabled and the elderly. The existing commitment of funds to the problems of chronically menatlly ill adults and seriously emotionally disturbed children should be continued or expanded. We also recommend $5 million in support in FY 86 - double the FY 85 level - for State Planning Grants. The problems of a substantial part of the homeless population and the chronically mentally ill demonstrate the need for assisting states to plan and coordinate a continuum of services to effect a rational transition from in-patient to out-patient care.

STATEMENT OF THOMAS SEESSEL, EXECUTIVE DIRECTOR, NATIONAL COUNCIL ON ALCOHOLISM

Senator WEICKER. The next witness is Thomas Seessel, executive director, National Council on Alcoholism.

Mr. SEESSEL. Good morning, Senator Weicker.

My name is Thomas Seessel. I am executive director of the National Council on Alcoholism. We are the only voluntary health organization operating on a nationwide basis to reduce the effects of alcohol abuse and alcoholism through a network of about 200 State and local councils that work with us. We work on efforts to prevent the onset of alcohol problems among our young people, and we work to inform the public that alcoholism is a treatable disease for which help is available.

We try to bring this message to problem drinkers, their families, their coworkers, and their friends.

The National Council on Alcoholism is a private, nonprofit organization. We receive no funds from the NIAAA or ADAMHA. So I speak to you today in the public interest as a citizen broad-based national organization, and we thank you for the opportunity to appear before this committee on behalf of the NIAAA appropriation.

We believe, Senator Weicker, that the American public does not yet fully comprehend the pervasiveness of this alcohol problem. We think that it is perhaps the Nation's most neglected and misunderstood public health and safety issue today. There is scarcely a community, a school, a neighborhood, office, factory, or family that has not been touched by an alcohol problem.

A 1983 Harris poll found 38 percent of American families reporting that they are beset with an alcohol problem. Alcohol claims twice as many American lives each year as were lost during the entire Vietnam war, and alcohol-related traffic accidents are the leading cause of death among our young people.

The NIAAA is crucial to this problem because it is the lead Government agency developing new knowledge about this disease which is one of mankind's most persistent and baffling maladies. There is no other important source of funding, either Government or private, for this effort.

We have come a long way in the field since the dark days, not so long ago, really, when alcoholism was viewed as a moral failing, and hospitals would not accept or treat alcoholics, and when public drunkenness was a crime in many States.

Alcohol study is now a respectable and serious enterprise. It is a serious science, thanks in large part to the work of NIAAA over the past 15 years. We include prevention, treatment, and epidemiology along with the natural sciences when we say this.

It is important that we continue the pace of NIAAA's work. Science is on the verge of very important new discoveries and breakthroughs, and one of the most exciting is the finding about the genetic predisposition of alcoholism. We must continue to push the frontiers of this knowledge.

It is critical that we continue this progress at NIAAA, to increase our knowledge and accelerate our efforts, with funding above the levels proposed by the President. The research being done by NIAAA is not arcane research that is going to sit on a shelf, rather it is needed out there in the field by practitioners, by physicians in clinical situations, by families, by parents, by State and local officials, by citizen grassroot organizations, and others who are desperately in need of new knowledge about how to deal with this problem.

Therefore, Senator Weicker, we urge, on behalf of the National Council on Alcoholism, an $87 million appropriation level for fiscal year 1986 for the NIAAA, joining with the professional judgment figure at that level, and a $545 million figure at the authorization level for ADAMHA.

The NIAAA figure of $87 million breaks down into $55.3 million for extramural research, $13.4 million for intramural research, $2.7 million for research training, $1 million to fund the Clinical Training Program for the first time, and $14.6 million for NIAAA operations.

I thank you very much, Senator, for your attention, and for this opportunity to appear before you. I will be glad to try to answer any questions that you or the staff may have.

PREPARED STATEMENT

Senator WEICKER. I have no questions. I thank you very much for your testimony, which, I might add, will be included in its entirety in the record.

Mr. SEESSEL. Thank you, Senator Weicker.

[The statement follows:]

STATEMENT OF THOMAS SEESSEL

The National Council on Alcoholism is grateful for the opportunity to present testimony concerning the Federal budget for alcoholism and alcohol abuse programs in fiscal year 1986.

Founded in 1944, NCA is comprised of some 200 local voluntary councils on alcoholism, representing thousands of volunteers nationwide who dedicate themselves and their personal resources to combatting alcoholism and alcohol abuse through community education, prevention, legislative advocacy and public service. In our view, the problems of alcoholism and alcohol abuse constitute a major public health threat and as such demand the application of federal funds for research, prevention and treatment. However, NCA itself does not accept government funds, relying solely on contributions from the private sector.

The 1984 Institute of Medicine Report, "Research on Mental Illness and Addictive Disorders: Progress and Prospects" indicates that mental disorders, alcoholism and drug addictions profoundly disrupt the lives of 30 to 45 million people in the nation each year, with conservative estimates of annual expenditures for direct health care at $20 billion and of total economic costs at $185 billion. The 1984 Research Triangle Institute in consultation with ADAMHA report on "Economic Costs to Society of Alcohol and Drug Abuse and Mental Illness" estimated the cost to the nation of alcohol abuse alone in 1983 to be $116.7 billion. The prestigious IoM report goes on to echo the concerns of a number of government and private sector studies of the past five years in expressing concern for the limited amount of research now possible on disorders under the ADAMHA umbrella, given their enormous costs to society, and recommends substantial and steady increases in support for ADAMHA research and research training over the next five years.

Outside the scientific and research communities, a broad-based cross-section of private organizations and government agencies have recognized and articulated the need for high-quality research on alcoholism and alcohol-related problems with the aim of providing comprehensive prevention and treatment strategies to the resolution of this devastating disease and the sweeping dimensions of this major public health problem. Heightened public awareness and profound concern regarding the role of beverage alcohol in fatal accidents of every description, but most particularly traffic fatalities, and the alarming incidence of alcohol use among our nation's young people at earlier and earlier ages which carries with it the incalculable damage of arrested development, poor academic performance, early addiction, high incidences of homocide and suicide, to name just a few, has generated an unprecedented interest in alcoholism research by grass-roots citizens organizations and professional groups alike. The Department of Justice, the National Transportation Safety Board and the Drug Enforcement Administration have all recently begun to address prevention and education strategies to combat youthful drinking patterns. The American Bar Association, the National PTA, and the National Federation of Parents for Drug Free Youth have all targetted the prevention of teenage alcohol misuse as major organizational priorities. NCA has been a major partner in these efforts. These agencies and organizations all look to NIAAA for leadership and information regarding effective methodologies to tackle alcohol problems as well as for state-of-the-art research information to disseminate to their respective constituencies. Regretably, the NIAAA budget cannot begin to keep pace with the expressed need for information and technical assistance. As a result, both private and public efforts to address these important health and social issues are constrained by a federal alcoholism budget which continues to fare far poorer than federal research funding for health conditions of far less significance and importance to the American people.

As a consequence, progress is not what it might be given the high level of commitment. Many organizations are reinventing the wheel by applying prevention and education strategies which have already been researched by NIAAA and NIDA and deemed relatively ineffective. Policymakers at all levels of government would welcome further research guidance to make informed decisions on critical prevention measures including the drinking age, alcohol advertising, alcohol excise taxes, restrictions on happy hours, etc. Perhaps more troubling is the fact that decision-making often goes on in the absence of knowledge about the existence of such research because of the fiscal restraints on NIAAA's information dissemination function. In the area of treatment, much remains to be known and shared if we are to significantly increase our facility to intervene and treat problem drinkers and alcoholics — a population of some 13-15 million Americans, 85% of whom remain untreated and ignorant of the promise of recovery and hope.

Despite severe limitations on NIAAA's ability to support promising research pursuits and to effectively share their findings, the federal alcoholism effort has made enormous strides and is on the threshold of some exciting gains in knowledge and understanding about this complex and devastating disorder. These include convincing evidence regarding a genetic predisposition to alcoholism, new opportunities for investigating the metabolism of alcohol, noteworthy advances about the effects of alcohol consumption during pregnancy, new knowledge about the partial reversal of brain atrophy caused by chronic alcohol use with sustained abstinence. All of these advances suggest the vitality of a research pursuit which can only be greatly enhanced by increased federal support. NCA applauds the accomplishments of the still youthful NIAAA in its 14 years of existence and continues to believe that the Institute must grow if it is to remain viable as a reservoir of national research, the focal point for federal policy on alcohol problems, and a resource accessible to all Americans who seek information about this deadly, but treatable disease.

In this regard, NCA is dismayed about the low level of funding proposed in the President's budget for NIAAA, which includes only $64.8 million for alcohol research in 1986, and proposes cutbacks in 1985 from the amounts appropriated. The decision of the Office of Management and Budget to reduce the number of new and competing grants in 1985 and utilize the savings for continuation grants is tantamount to an erosion of the NIAAA grant program, at a time when more dedicated scientists are becoming interested in alcohol investigations. NCA strongly supports Joint Resolutions introduced in both House and Senate which call for full funding of new and competing grants under the ADAMHA umbrella for which funds were appropriated.

In light of the proposed cutbacks currently proposed for investigator-initiated grants as well as NIAAA's direct operating budget, the small increases proposed for fiscal year 1986 do not even represent a minimum level necessary to maintain current initiatives.

The Institute of Medicine recommended last fall that the NIAAA's budget be increased to $100 million to address the wealth of research opportunity that exists. On behalf of NCA, I would urge the Committee to consider an increased appropriation in 1986 of at least $87 million, an increase of $22.2 million over the amount proposed in the budget. A $22.2 million increase would allow NIAAA to fully fund current programs that will have to be curtailed sharply in both FY 1985 and FY 1986 under the proposed budget, and would allow for some expansion in both research and training programs. Although our budget request is lower than the IoM Reports recommended level of $100 million for alcohol research and training, we are highly supportive of reaching this level by FY 1987.

The $87 million proposed for NIAAA research includes $55.3 million for extramural research activities, an increase of $7 million for regular research grants over the FY 1986 President's budget. This figure includes full funding for grants in progress, a moderate 10% increase in new research grants, full funding of the nine existing research center grants, some expansion of the research scientist awards, and restoration to the previous year's level of epidemiology contracts which were reduced by 50 percent.

Our proposal would increase the NIAAA intramural research budget to $13.4 million. The budget level for this important federal research program remains at $8.4 million for the third year in a row. This program is dedicated to elucidating the mechanisms by which alcohol produces its intoxicating, addicting, and pathological consequences and consequently, to developing the foundation for appropriate treatment and prevention of problems generated by alcohol abuse and alcoholism. Increased support and expansion of this NIAAA component is long overdue, particularly in light of the exciting studies underway in the newest, clinical research portion of the program. The $5 million increase we propose would enable NIAAA researchers the opportunity to initiate additional high priority research.

In the training area, we propose a doubling of the research training effort from $1.5 million to $2.7 million and to begin a clinical training program which Congress required under last year's NIAAA/NIDA reauthorization legislation. The 1983 report of the NIAAA Research Planning Panel highlighted deficiencies in NIAAA's research training program resulting from inadequate funding levels, with a particular impact on such relatively new alcohol research disciplines as prevention. The research community at large, particularly those individuals traditionally under-represented including women and minorities, need to know that there is stability and growth in this field to make alcohol-related research a viable career goal. At the same time, NCA continues to believe that more substantial support for alcoholism clinical training is appropriate and urgently needed. The $1 million directive for NIAAA and NIDA clinical training activities contained in last year's authorization legislation remains unfunded. While this directive would breathe some new life to the now moribund NIAAA/NIDA Career Teachers Program, it does not begin to meet the clinical training needs of this still young, rapidly growing field. There is a pressing need for clinical training funds to assist the growth and development of the rank and file workers of this field -- the certified alcoholism counselor. Advances in research are happening rapidly and research results which hold important implications for treatment need to be disseminated to providers -- that dissemination of information is a federal, NIAAA responsibility, and clinical training is one of the ways NIAAA can fulfill that mandate. Nevertheless, a $1 million appropriation as a response to last year's directive would offer an important signal to the alcoholism field suggesting a renewed commitment to the importance of clinical training to successfully identifying and treating this illness.

Under the Administration's request, NIAAA would receive only $10.7 million for direct operations and program management functions, a decrease of $1.3 million below the FY 84 appropriation of $12 million. This item provides support not only for standard administrative activities, but for a range of important functions not encompassed under the research authorities. The President's proposed level translates into a significant reduction in staff and undoubtably a reduction in critical services provided by the Institute including research dissemination, policy analysis, technical assistance, public education and prevention activities. NCA encourages an appropriation of $14.6 million and 153 FTEs to adequately support the Institute's research, research training and prevention and research dissemination activities.

Finally, the National Council on Alcoholism joins with other organizations in the alcoholism, drug abuse and mental health fields to urge full appropriations of the fiscal year 1986 authorization level of $545 million for alcohol, drug abuse and mental health services (ADMA) block grant. We consider this funding level to be barely adequate to address the needs of the network of treatment services now severely overtaxed by increased client loads at a time when state and local resources are shrinking. While NCA supported the authorizing committee's directive to the states to set-a-side 5% of the block allocation for new and expanded services for alcoholic and drug-addicted women, we were distressed that a substantial increase in the block grant appropriation was not forthcoming. As a consequence the set-a-side has served to jeopardize the continuation of already existing services for all populations and it is unclear whether any significant contribution to the expansion of services for women will indeed occur. The Administration's budget with its proposed $490 million -- no increase from current funding levels -- will only serve to exacerbate the struggles of states to provide adequate services to all individuals in need of treatment.

While the economic costs of alcoholism and alcohol abuse to the nation are appallingly high, the human costs of this illness to individuals, families and communities are too lengthy and painful to recount. The National Council on Alcoholism remains an outspoken advocate for the needs of suffering alcoholics and their families. But we cannot do the job alone. Our organization and a host of others representing literally tens of thousands of concerned and committed Americans need resources and tools to combat this major public health problem which only the federal government can adequately provide. Major research advances over the last decade holding great import for prevention, intervention and treatment have been coupled with an unprecedented rise in public awareness and support for the alleviation of this devastating illness. We now face the opportunity and challenge of dramatically reducing the toll of this illness in our lifetime. Substantial increases in federal support for alcohol research and treatment services today, can, and we believe, will translate into a healthier and more productive nation in the days to come.

STATEMENT OF ESTEBAN MEZEY, M.D., MEMBER, RESEARCH SOCIETY ON ALCOHOLISM, AND PROFESSOR OF MEDICINE AT JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

Senator WEICKER. Our next witness is Dr. Esteban Mezey, member of the Research Society on Alcoholism. Dr. Mezey, it is nice to have you here.

Dr. MEZEY. I am also professor of medicine at Johns Hopkins University School of Medicine, and I have been involved in alcoholism research since 1965. I run the alcohol program at the Johns Hopkins Medical Institute.

The proposed 1986 budget for the National Institute on Alcohol Abuse and Alcoholism will be disastrous to the continuation of recent advances in unraveling the causes and consequences of alcoholism. The budget of $54.1 million for research and training will result in a loss of 19 research grants for that year and subsequent years. Furthermore, the shortfall of $1.4 million for the fiscal year 1986 as part of the proposed budget has already resulted in a 5- to 10-percent cut in the budget of presently funded grants and reduces the budget base for future years.

Alcohol abuse and alcoholism are recognized as enormous health and economic burdens to the Nation. However, only 1.1 percent of the total combined NIH and ADAMHA research budgets was appropriated for research on alcoholism in fiscal year 1984.

A minimum current service budget, which was authorized for research of $61 million, or a total NIAAA budget of $76.3 million would be necessary to maintain the present level of research activity. This budget includes the authorized $61 million for research which would eliminate the shortfall and maintain 100 funded grants, as well as $2.7 million for research training, and $12.7 million for program support.

The $2.7 million for research training, which represents an increase from $1.5 million, would become comparable to the support of research training of NIH, which amounts to 6 percent of the extramural research budget. The $12.6 million for program support which represents an increase from $10.7 million would reinstate FTE's to the 1984 level of 220 from the present reduced 200.

Further significant growth in research on alcoholism would require a total research budget of $68 million to fund 110 research grants, $2.7 million for research training, $1 million for clinical training, and $15 million for program support, or a total NIAAA budget of $87 million, which is similar to what was proposed previously by the other people testifying.

The sophistication of the research and the opportunities for making breakthroughs in alcoholism research have never been greater. Rapid advances are being made in the following, among many, areas:

One, understanding of the genetic basis, hormonal and nutritional factors that control the disposition of ingested alcohol and susceptibility to alcoholism and alcohol-related diseases;

Two, physiological and biochemical factors which tend to link addiction and tolerance to alcohol;

Three, search for new practical markers to aid in the identification of social drinkers that are susceptible to the development of alcoholism;

Four, epidemiological studies to quantify the relationship between amounts of alcohol ingested and the development of alcohol-related diseases;

Five, mechanisms whereby alcoholism increases the susceptibility to the development of certain cancers such as esophageal cancer;

Six, mechanisms for the development of brain atrophy and dementia in alcoholics; and

Seven, pharmacologic intervention in the treatment of alcoholism.

The proposed fiscal year 1986 budget would have the following adverse consequences on alcoholism research would eliminate funding of new research scientist development awards. This means that talented young investigators will not enter research careers at a time when potential progress into the causes and consequences of alcoholism is so great. The development of young scientists is arduous and continuous process that if disrupted even temporarily is very difficult to recover.

The proposed budget would also result in the loss of a substantial number of research grants, as already pointed out. It has already resulted and will continue to result in 5- to 10-percent cuts in budgets of funded grants. Such a reduction often means that projected salaries cannot be met and hence research personnel need to be dismissed or cannot be hired.

Finally, the proposed budget will result in a reduction in the research and support staff of NIAAA with threatening consequences to the intramural research programs.

I respectfully urge you to recommend a budget for NIAAA which will allow for alcoholism research to continue at a level that this serious disease deserves.

PREPARED STATEMENT

Senator WEICKER. Dr. Mezey, thank you very much for taking the time to be here. Your statement in its entirety will be printed in the record.

[The statement follows:]

STATEMENT OF DR. ESTEBAN MEZEY

The proposed fiscal year 1986 budget for the National Institute on Alcohol Abuse and Alcoholism will be disastrous to the continuation of recent advances in unraveling the causes and consequences of alcoholism. The proposed fiscal year 1986 budget of $54.1 million for research and training would result in a loss of 19 research grants for that year and subsequent years. Furthermore, the proposed rescission of $1.4 million for fiscal year 1986 as part of the proposed fiscal year 1986 budget has already resulted in 5- to 10-percent cuts in the budget of presently funded grants and reduces the budget base for future years.

Alcohol abuse and alcoholism are recognized as enormous health and economic burdens to the Nation. However, only 1.1 percent of the total combined NIH and ADAMHA research budgets were appropriated for research on alcoholism in fiscal year 1984. A recent report by the Institute of Medicine on "Research on Mental Illness and Addictive Disorders" recommended a doubling of the fiscal year 1986 President's budget of $54.1 million for alcoholism research and training to $100 million. A minimum current service budget, which was authorized for research of $61 million, or a total NIAAA budget of $76.3 million would be necessary to maintain the present level of research activity. This budget includes the authorized $61 million for research which, would eliminate the shortfall and maintain 100 funded grants, as well as $2.7 million for research training and $12.7 million for program support. The $2.7 million for research training, which represents an increase from $1.5 million, would become comparable to the support of research training of NIH, which amounts to 6 percent of the extramural research budget. The $12.6 million for program support which represents an increase from $10.7 million would reinstitute FTE's to the 1984 level of 220 from the present reduced 200. Further significant growth in research on alcoholism would require a total research budget of $68 million to fund 110 research grants, $2.7 million for research training, $1 million for clinical training and $15 million for program support, or a total NIAAA budget of $87 million.

The sophistication of the research and the opportunities for making breakthroughs in alcoholism research have never been greater. Rapid advances are being made in the following, among many, areas: One, understanding of the genetic basis, hormonal, and nutritional factors that control the disposition of ingested alcohol and susceptibility to alcoholism and alcohol-related diseases; two, physiological and biochemical factors which tend to link addiction and tolerance to alcohol; three, search for new practical markers to aid in the identification of social drinkers that are susceptible to the development of alcoholism; four, epidemiological studies to quantitate the relationship between amounts of alcohol ingested and the development of alcohol-related diseases; five, mechanisms whereby alcoholism increases the susceptibility to the development of certain cancers such as esophageal cancer; six, mechanisms for the development of brain atrophy and dementia in alcoholics; and seven, pharmacologic intervention in the treatment of alcoholism.

The proposed fiscal year 1986 budget would have the following adverse consequences on alcoholism research:

One, it would eliminate funding of new research scientist development awards. This means that talented young investigators will not enter research careers at a time when potential progress into the causes and consequences of alcoholism is so great. The development of young scientists is arduous and continuous process that if disrupted, even temporarily, is very difficult to recover.

Two, it would result in the loss of a substantial number of research grants. This means dismantling some very productive laboratories causing irreparable damage to progress in our understanding of alcoholism. Also, it means that many excellent new grants from top investigators will not be funded. Of note in this regard is that presently only 28 percent of approved regular research grants projects are being funded.

Three, it has already resulted and will continue to result in 5- to 10-percent cuts in budgets of funded grants. Such a reduction often means that projected salaries cannot be met and hence, research personnel need to be dismissed or cannot be hired.

Four, it will result in reduction in the research and support staff of NIAAA with threatening consequences to the intramural research programs.

I respectfully urge you to recommend a budget for NIAAA which will allow for alcoholism research to continue at a level that this serious disease deserves.

STATEMENT OF HERBERT PARDES, M.D., CHAIRMAN, DEPARTMENT OF PSYCHIATRY, COLUMBIA UNIVERSITY

Senator WEICKER. Next we have our good friend, Dr. Pardes, chairman of the department of psychiatry at Columbia University. Nice to see you, Doctor.

Dr. PARDES. Senator, it is a delight to present to you the excitement of work in mental health and substance abuse for two reasons. First, the productivity and potential of these fields make us really excited today. Second, I and all of us in the field have enormous regard for you, because we see you as our leader in advocating and developing health care programs that are sensitive to patient needs.

I want to make four points.

Research on mental illness, alcoholism, drug abuse, and related sciences has never been more productive and exciting. The brain and behavior research going on in the ADAMHA Institute is first class.

Second, clinical delivery in mental health and psychiatry is showing increasing refinement. This refinement is already benefiting patients, but it promises to accompany and also contribute to this research revolution in bringing about a vast improvement in clinical psychiatric care.

Third, the therapeutic effectiveness of psychiatric treatment is growing steadily.

Fourth, the support that is needed to sustain this effort has to be varied.

The number of exciting developments in brain research, I gather you have heard before, include imaging techniques, mapping of receptors, determining specific receptors for opiates, documenting chronic effects of alcohol on brain function, and finding that the brain may be more responsive to therapeutic interventions and external factors. These are simply examples, but with more time we could tell you much more about it.

At the same time, the field is sharpening itself. There is better epidemiological data. There are better diagnostic concepts. There is more of a matching of treatments to specific disorders. Also the treatment effectiveness has increased dramatically. We can treat successfully about 80 to 90 percent of all depressive disorders today.

Lithium which treats about 70 percent of manic depressive disease effectively is now complimented by Carbamzepine which helps to treat some of the patients who are not responsive to lithium.

There are new pharmacological treatments for opiate addition.

I can point out many advances, but you know also that there are countless problems. One can see by the homeless mentally ill, the number of people who have had readmissions for schizophrenic episodes, the many sufferers from alcohol and drug abuse, that there is much yet to be done.

In order to take full advantage of the promise of some of these scientific developments there has to be adequate support of psychiatric research. There are only some 25 psychiatric medical school departments which have a modest psychiatric research effort. There are only, however, amongst them 10 to 12 that have substantial efforts, and many of them are just hanging on given some of the financial constraints.

We have to build a larger enterprise to take advantage of the exciting opportunities in brain research and behavior research, that means that there has to be a sufficient number of research grants by which investigators with valuable ideas can secure support. In addition, we have to ensure, given diverse and extensive fiscal constraints on academic health centers, that first-class scientists are supported. There are a variety of other mechanisms, besides research grants, which are critical. These, like research grants, are also investigator initiated.

The Career Scientist Development Program at NIMH, NIDA, and NIAAA is one of the most successful health research programs supported by the Federal Government.

Most medical schools with substantial psychiatric research enterprise have clinical research centers, and these, too, must be fully supported. The cost of doing clinical research, both inpatient and outpatient, is enormously expensive given the advances in technology and the need for multidisciplinary involvement. In order to give the research an adequate chance, there has to be support for such research centers.

Further, we are trying to involve young people, and one of the prime methods by which we do that is through the mechanism of small grants. These allow researchers to test new ideas as pilots or modest programs before launching into major research grants. This is one of the prime ways of involving young people in research, and there are a variety of other research mechanisms and research training mechanisms that have to be supported.

In a nutshell, Senator, the research is exciting. The field is dramatically and rapidly improving its sophistication and specificity, and the treatment is becoming more effective. In order to take advantage of this, we need substantial support across the board in a variety of ways by which research is encouraged.

We are suggesting a $252.6 million budget for 1986 for NIMH. This is documented in a brochure that we put forth. The ADAMHA Administration budget falls dramatically short of the needed resources given the extent of the problem and the potential for scientific advancement.

The 1984 IOM report that Dr. Barchas referred to earlier suggested more appropriate targets for support of the three ADAMHA institutes in 1983 dollars, meaning, NIAAA, $100 million; NIDA, $100 million; and NIMH $300 million.

I appreciate the opportunity to speak to you, and I want you to know that we revere you enormously for the fact that we know you are fighting for the best interest of people who suffer from these disorders around the country.

Senator WEICKER. Thank you very much. I hope I am successful. If I am not, I am not sure how much admiration I will get, but I have some good allies in this fight.

You are recommending $252.8 million?

Dr. PARDES. Yes.

Senator WEICKER. Where do we stand?

Dr. PARDES. I might add, Senator, that we have tried to document this point by point, going through the budget rather knowledgeably, and trying to pick up the various mechanisms that make it happen.

Senator WEICKER. All of the areas that fall under the committee's jurisdiction, obviously, have an economic cost if they are not tended to. It does apply across the board, but certainly the work that is done here, if it remains undone, the economic costs are staggering.

Dr. PARDES. It is staggering. The other thing is that you have the costs being very dramatically high at the same time that the brain research and behavior research are so exciting, and we can really see advances. In the 1940's and 1950's, the major advances were in infectious diseases. I think that we have seen progress in heart disease and cancer over the last 10 to 20 years. I think we are entering the decades in which we will see the advances on the diseases that are in the psychiatric and brain areas generally.

Senator WEICKER. The other thing, of course, it seems to me anyway, there has been an increase for those who need help.

Dr. PARDES. One of the encouraging things to me in the field is that organizations like the Mental Health Association and the National Alliance for the Mentally Ill are becoming increasingly active in working together with professionals because we both see some common ways to make advances in the problems.

Senator WEICKER. For example, I never heard, when I was growing up as a child, I never heard of mental illness vis-a-vis a child. Yet, within the last 5 or 6 years, mental illness has been brought to our attention in various ways through the media, and also in a positive way by those who are involved in the mental health field, that mental illness in children is not uncommon.

Dr. PARDES. The idea of trying to interrupt problems at the earliest possible point is one that we advocate. If you want any documentation of the fact that this is a serious problem in children and adolescents, you can see that the leading cause of death in teenagers, for example, is suicide. There are an enormous number of kids who suffer from learning disabilities, from autism, from hyperactive states, from early schizophrenia. The child psychiatric disorders are rather pervasive, and the fact that the research is exciting means that we will be able to identify problems earlier, and perhaps prevent the development of a more chronic situation.

Senator WEICKER. This business of teenage suicides, is this something truly of recent vintage, or is it just the fact that it is now coming out into the open? Which is it? Is it on the increase as a matter of these times, or has this always been going on but we didn't know about it?

Dr. PARDES. Suicide has always been one of the leading causes of death in particularly late teenage and early twenties. I think that it is getting more recognition now. I am not sure that the figures show that dramatic an increase in numbers, but there has been a number of these children who have been either attempting or committing suicide for some time. It has been one of the major causes of death among that group.

Senator WEICKER. Is this something, from your experience, not only where you are now, but your previous experience, that you are aware of, that NIMH is involved in in a specific way?

Dr. PARDES. NIMH is trying to launch new efforts in the area of suicide, and also in related issues like the detection of depressions which often are a setting in which a suicide might be more likely.

I think the problem today is that there are a number of psychiatric problems and there are limited resources, and the one thing that has not happened, in contrast to the other health care fields, is that there has never been a major boost in the research support in NIMH, NIDA, and NIAAA. They have never had the boost to take advantage of some of the excitement of research like what happened, let's say, in some of the other areas in the early seventies.

Senator **Weicker**. As I have said in my other hearings, on another area which I will touch upon in a minute, that is because we still have to convince an awful lot of people that you are talking about an illness, I don't care how you cut it. The fact is that the public perception places the mentally ill person far more in the category of criminal than somebody who is ill.

Dr. **Pardes**. I think you are absolutely right. I understand that there are some new attempts to go to advertising clips which will be emphasizing some of the mental illness aspects of psychiatric illness to give it greater public attention. I think your point is well-taken.

I think that the farsighted public position today will be, given that the research is as exciting as it is, it is now the time to make the investment that will pay off in the long run because you can really do it. It is not just happenstance that in the last 4 or 5 years, two Nobel prizes and about four or five Lasker awards have all gone to research in this general area.

Senator **Weicker**. I am involved in a lawsuit with the town of Greenwich right now. We have a halfway house there for youngsters who suffer from various mental illnesses. It will be a classic case on taxation. They have lowered the assessment on the surrounding houses. I have joined with the State of Connecticut in a lawsuit against my hometown.

I asked the question: If there was somebody suffering from Alzheimer in this house, would you lower everybody's assessment? God knows, there are a lot of people who are dying from Alzheimer's in the town of Greenwich, and I don't see anybody asking for declined assessments, not for cancer, not for heart disease, et cetera. But somehow or other because it relates to mental illness, that is occasion to depreciate the value of the property. It really gives you an insight into how people view this thing.

Dr. **Pardes**. I had a personal experience in a home being put right in my residential community. When I went to support the home, my neighbors became antagonistic to me.

I think that one of the nice things about the research and the refinement in psychiatric care is that it is becoming increasingly recognized as diseases that require health and clinical and medical attention, and I think that that will help in terms of the citizen population recognizing it as a serious problem to be dealt with.

PREPARED STATEMENT

Senator **Weicker**. Thank you very much for your testimony. It is always a pleasure to chat with you. Your statement, in its entirety, will be printed in the record.

[The statement follows:]

STATEMENT OF DR. HERBERT PARDES

Senator Weicker it is a delight to present to you the excitement of work in mental health and substance abuse for two reasons. First, the productivity and the potential make those of us who have worked in mental health for years feel optimistic about the prospect of helping people in pain. Second, I have an enormous regard for you as one of the outstanding leaders in advocating and developing health care programs that are sensitive to patients' needs.

I want to make four points:

1. Research on mental illness, alcoholism, drug abuse and related sciences has never been more productive and exciting.
2. Clinical delivery in mental health and psychiatry is showing increasing refinement. This refinement is already benefitting patients, but it promises to accompany and also contribute to this research revolution in bringing about a vast improvement in clinical psychiatric care.
3. The therapeutic effectiveness of psychiatric treatments is growing steadily.
4. The support that is needed to sustain this effort has to be varied.

EXCITEMENT OF RESEARCH

With new imaging techniques we are finding suggested differences in brain functioning in disorders ranging from Alzheimer's Disease, to Schizophrenia, to Manic Depressive Disease, to Panic Disorders. Further, we are finding substances throughout the brain in minute amounts which have effects on all kinds of functioning including the regulation of anxiety, of appetite, of depressive moods. These substances act on specific areas in the brain called receptors. NIMH is developing the ability to map those receptor sites. As a result, we are going to be able to produce increasingly effective drugs with less side effects, because we will be able to select medications that act on the specific receptors, while leaving alone other receptors. NIDA-supported research has demonstrated that the brain has specific receptors for opiates, and makes and stores substances called opioid peptides that have actions quite similar to morphine. This research will likely suggest new treatment approaches to pain relief that will not include the potential for addiction. It has also been demonstrated that distinct classes of opioid receptors seem to mediate the analgesic vs. the euphoriant properties of opiate drugs. NIAAA-supported research has documented the chronic effects of alcohol on brain function and the potential for recovery with abstinence. We have determined that a potential common mechanism underlying alcohol's effects on multiple organ systems may relate to its effects on cellular membrane fluidity. These studies suggest new ways of understanding the development of tolerance and physical dependence.

We are also finding that the brain is more responsive to therapeutic interventions and to external factors. The idea that brain diseases could not be modified has yielded to new knowledge, and the opportunity for treatment of many brain diseases is becoming apparent. These are but a few of the scientific advances related to psychiatric problems.

REFINEMENT AND DIFFERENTIATION

At the same time, the field of clinical psychiatry is rapidly improving in its precision. No longer is the focus only on large groupings of disorders such as anxiety disorders or depressive disorders. The differentiation of narrower more specific disorders along with new techniques for diagnosing and assessing psychiatric disease in a public health manner has recently given us some of the best data that we have ever had on the incidence and prevalence of psychiatric disorders.

This greater specificity in diagnosis also fosters research by creating homogeneous groups. By sharpening our understanding of the diseases we can differentiate subcategories of them. Panic disorders have emerged as a subcomponent of anxiety disorders and manic depressive disease as a subcategory of affective or depressive disorders. The study of these subcategories can lead to treatment specifically useful for them. We can then turn our attention to other subcategories which may be more resistent to our understanding. Differentiation of these large disease entities allows us to find treatments for some and to direct our attention to those for which our treatments currently are of insufficient help.

INCREASED TREATMENT EFFECTIVENESS

This refinement and differentiation of diagnosis, epidemiology and treatment are central to the process by which psychiatric treatments are becoming ever more effective. Today, we can successfully treat about 80 to 90 percent of all depressive disorders. Depressions constitute one of the most common classes of psychiatric diseases. We are increasingly effective with specific treatments for anxiety disorders. We have found that a combination of treatments is most helpful to schizophrenia, namely psychopharmacological treatments, psychoeducational treatments with families, and attention to social skill needs by patients. Lithium which is effective in about 70 percent of those people with manic depressive disease leaves about 30 percent who are unresponsive. A new drug call Carbamzepine seems to help some of the people who are not helped by lithium. As a result, we are increasing the size of the population for which we can give effective psychiatric treatment. New pharmacological treatments have been introduced for opiate addiction including naltrexone, a narcotic antagonist, which has been shown to be especially helpful in the treatment of addicted health care professionals; and clonidine, which has enabled physicians to treat opiate withdrawal without the use of addictive drugs. Delirium tremens has virtually disappeared as a cause of death in the United States in contrast to many of the countries in eastern Europe.

There are still countless problems. I know you are aware of the unsatisfactory conditions in psychiatric institutions. Your leadership in calling attention to these problems is most encouraging. The long-term solution is going to come largely from research developing better methods of care.

Autistic infants who are unresponsive, teenagers who commit suicide, all remind us of the many unanswered questions. One can see by the homeless mentally ill, the number of people who have readmissions for schizophrenia episodes, the many sufferers of alcohol and cocaine abuse and the million and one-half people who are suffering from Alzheimer's, and for whom we have little treatment, that there is an enormous amount to be done. However, we must also recognize the progress that has been made. This progress along with the extraordinary excitement of science suggests that we are going to become more and more effective in helping the 39 million people who suffer from diagnosable psychiatric disorders in this country.

SUPPORT FOR A DIVERSITY OF MECHANISMS

Now in order to take full advantage of the promise of this science, there has to be adequate support for psychiatric research. There are only some 25 psychiatric medical school departments which have even a modest psychiatric research effort. There are, however, even a smaller number, probably less than 10 which have a substantial enough effort to be likely to cause a tajor impact on psychiatric disorders, and many of these centers are just hanging on given the constraint in financial support. We have to build a larger enterprise to take advantage of the enormous opportunities of research. That means that there has to be a sufficient number of research grants by which investigators with valuable ideas can secure support. In addition, however, we have to ensure given diverse and extensive fiscal constraints on academic health centers that first class scientists are supported. There are a variety of other mechanisms critical to this effort. These, like research grants are also investigator initiated. The Career Scientist Development Program at NIMH, NIDA, and NIAAA is one of the most successful health research programs supported by the Federal government. Most medical schools with a substantial psychiatric research enterprise have Clinical Research Centers, and these too must be fully supported. The cost of doing clinical research either through outpatient work or inpatient beds is enormously expensive and demands the involvement of multidisciplinary groups. In order to give the research an adequate chance, there has to be sufficient support for such centers.

Further, we are trying to involve young people, and one of the prime methods by which we do that is through the mechanism of small grants. These allow researchers to test new ideas as pilot or modest programs before launching major research grants. It is one of the prime ways of involving young people in research. This mission of increasing the number of young people involved in research also depends upon programs such as the Research Training Programs of ADAMHA. The new efforts at supporting clinical investigators and physician scientists will also help. In a nutshell, there are a variety of mechanisms by which the research enterprise in mental health secures enough support to take advantage of the opportunities in psychiatric related research and to ensure an adequate number of investigators and particularly young and well trained investigators to allow us a real opportunity at making progress in psychiatric disorders.

CONCLUSION

Senator, the research is exciting, the field is rapidly and dramatically improving its sophistication and specificity, the treatment is becoming more effective. To take advantage of these advances and ensure the most productive results, there must be adequate support of research grants, career development awards, physician scientist and clinical investigation awards, clinical research centers, small grants, and a variety of other mechanisms including research training. We have produced a pamphlet on NIMH research detailing what we believe is an appropriate budget for 1986. The ADAMHA budget falls dramatically short of the needed resources given the extent of the problem, and the potential for scientific advancement. A 1984 IOM report suggested targets for support of the three ADAMHA institutes in 1983 dollars at: NIAAA $100 million, NIDA $100 million, NIMH $300 million. I appreciate the opportunity to speak to you. We know that you will do everything you can to support our efforts. These efforts today will mean relief to millions of mentally ill and their families in the near future.

STATEMENT OF MELVIN SABSHIN, M.D., AMERICAN PSYCHIATRIC ASSOCIATION

Senator WEICKER. The next witness is Dr. Melvin Sabshin of the American Psychiatric Association.

Dr. SABSHIN. Good morning, Senator. It is good to be back here testifying about the research and research training programs at ADAMHA today.

I am testifying for several psychiatric associations, and I have also been involved with coalitions that you have already heard about. I want to emphasize that these coalitions or groups, who ordinarily have not been involved with the alcohol, drug abuse, and mental health problems, are advocating relatively increased dollars for ADAMHA as compared to NIH. That is unusual and interesting.

With your permission, I would like to include my written statement in the record relevant to the testimony today, and an additional statement about areas not covered in today's testimony.

I do want to join my distinguished colleague, Dr. Pardes, in commending you for your leadership, Senator. We are all mindful and grateful to you, especially your activity in regard to fighting against the efforts and manipulations to reduce the budget by the so-called multiyear funding. Your efforts there are much appreciated as is your consistent caring for people, that is unusual these days.

I recognize, in the limited time I have, very little can be said, but I want to read a statement by another distinguished national leader, and then I will identify that person after I read the statement.

> I have a very serious and growing concern about our country's efforts in terms of serious mental illness. I think we have been, as a Nation, hiding it for too long. I am prepared to be part of whoever would like to join in putting it on the table and up front of the American people because I think that it is one of the most debilitating of all the diseases around. The serious mental illness in our country is probably doing more harm and costing more money and having more of an effect on families and individuals than many of the diseases that we put up front and center, even comparing it with cancer.
>
> I want that known right up front, clearly I am one who has looked to cut this deficit, but clearly I don't see any areas that we ought to do more in, that we have done less in, in terms of the relative importance and the relative seriousness of the problem, as in the area of mental illness. It is not an area that I am going to be interested in balancing the budget on, I assure you. We have done some good in the last couple of years in increasing. I hope that we give some encouragement to those who are running the programs by continuing and offering them some continuity.

As I think you understand, Mr. Chairman, this was a statement made here in this subcommittee by Senator Pete Domenici. He said this at a hearing on April 6.

Why, besides some obvious reasons, do I bring up this point? First, because of the paradox that we face this year. On the one hand, as has been well pointed out today, there is an explosion of knowledge, we are on the brink of new understandings, of clarification of illness and of treatment, at the same time, the issue of budget consciousness comes to the forefront, as indeed it should, and that you and this committee, and the chair of the Budget Committee see the importance of this program, I think is of great national significance. I think that it is a landmark here.

In the epidemiological catchment area, the prominence and incidence of disease report has just come out, clarifying, objectifying the disease characteristics of mental illness. The Institute of Medicine study defines the scope of illness, as was discussed here today, it is a very good illustration of the advance in science and the clarification, and beginning to answer some of the misperceptions and stigma.

I know that when the agency heads testified here, they had to be passive. I don't have to be passive. I join my distinguished colleague Dr. Pardes in saying that the question of depression and suicide—incidentally, Senator, the rate of increase in suicide, adolescent suicides, there has been an increase from Dr. Pardes' own figures back at NIMH of about tenfold in 25 years. It has now stabilized, but it is an interesting study in its own right. But the devastating effects of schizophrenia, the alcoholism and drug abuse and their impact on this country, the homeless, and the chronic illness in our elderly population, all deserve our attention. We are at a point of breakthrough, let's not stop the momentum. Thank you very much.

Senator WEICKER. Thank you very much.

You should know that in the behind-the-scene activity, Senator Domenici is four-square behind the efforts of this committee. He clearly had a difference in terms of the administration position on the funding to be allocated. He is a strong right arm in this area.

Dr. SABSHIN. I am very happy to hear that.

PREPARED STATEMENT

Senator WEICKER. Thank you very much. Your statement will be printed in the record in its entirety.

[The statement follows:]

STATEMENT OF DR. MELVIN SABSHIN

INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Mr. Chairman and Members of the Subcommittee, I am Dr. Melvin Sabshin, Medical Director of the American Psychiatric Association, a medical specialty society of over 30,000 psychiatrists nationwide. I am pleased to again appear before the Subcommittee not only to represent the particular concerns of the American Psychiatric Association regarding the President's proposed FY 1986 appropriations for the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), but also those of the American Association of Chairmen of Departments of Psychiatry, the American Association of Directors of Psychiatric Residency Training, and the American Society for Adolescent Psychiatry. I also wish to direct the Committee's attention to the fact that this year for the first time the many constituent organizations in the mental health and substance abuse community have united in a collective set of funding recommendations already endorsed by several groups, including the Ad Hoc Group for Medical Research Funding, the Mental Health Liaison Group, the Coalition for Health Funding and the newly-formed Ad Hoc Group for NIMH Research Funding. With your permission we would like to insert in the hearing record the research overview brochure developed by this new Ad Hoc organization.

I will confine my remarks today to the Research and Research Training programs of the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA). I will be submitting an additional statement for the record on the other important programs supported by the ADAMHA.

Mr. Chairman, two landmark studies precede our appearance today: First, the National Academy of Science's Institute of Medicine major study which concludes that an increase over the next 5 years in the federal investment in ADAMHA-supported research is necessary to understand, prevent and treat mental and addictive disorders. Second, the major study on psychiatric disorders by researchers in the Epidemiological Catchment Area Program (ECA) of the National Institute of Mental Health, which reaffirms the magnitude of mental and addictive disorders in American society, and reports that during any given six-month period, one in five adults will suffer from a diagnosable mental disorder. In our testimony today we will call to your attention many of the significant findings from these major studies.

Research Progress on the Major Disorders and a Proposal for Growth

ADAMHA continues to maintain and support a strong research effort in the basic biomedical and behavioral sciences. The quality of the agency's research program is the best in history, as evidenced by an overall 171 priority score for awards funded in fiscal 1985.

We agree with the IOM that a comparable federal government effort need be made in research on mental and addictive disorders -- as physical disorders --both to regain ground lost since the mid-1960's and to reflect the cost of these disorders in our society. We are also confident that the field is ready for substantial progress in a range of ADAMHA-supported programs. Rapidly emerging information about brain function and of normal and abnormal behavior offer hope that the invigorating effects of strong and sustained research support soon will yield valuable dividends.

We would like to illustrate for you some of the major research problems that ADAMHA addresses, of progress already made, and of some especially promising directions for additional research.

Affective Disorders (Depression)

These disorders, which include mania and the various categories of depression, may be the most destructive group of mental illnesses in the United States in terms of prevalence, mortality, economic cost, and impact on families. Almost 10 million Americans are afflicted each year. Depression also appears to be frequently involved in drug and alcohol abuse which together affect another 10 million people. Through research, most acutely depressed patients now respond to some combination of pharmacological and psychotherapeutic treatments. Treatment has improved radically with the discovery of effective antidepressant and antimanic drugs and the development of improved psychosocial therapies. The NIMH has played a key role in supporting the clinical research. Questions still remain, however, as to how depression manifests itself during childhood and adolescence; about the most effective interventions in the young population; and as to which patients will be helped by what treatments or combination of treatments.

Schizophrenia

Schizophrenia, while not the most common mental illness, is perhaps the most costly and devastating illness. Cost estimates for schizophrenia in the United States alone range upward from $20 billion annually. Drug and psychosocial treatments have now reduced the burden of the illness on most of the 1.4 million Americans who suffer from it during a given six-month period, yet improvement is still slow and erratic. The clinical actions of antipsychotic drugs are generating a strong interest from the field. Researchers have made several hypotheses about schizophrenia that are helping to guide research. This work requires basic research support in neurobiology, psychopharmacology, genetics, and on neurophysiological and neuropsychological features of schizophrenia.

Drug Abuse

The National Institute on Drug Abuse (NIDA) is the leading federal institute responsible for supporting research on drug abuse. In the ten years of its existence, NIDA's research program has produced an explosive growth in knowledge of the biological and behavioral mechanisms of drug action, of effective prevention and treatment techniques, and of ways of obtaining reliable measures of the extent and prevalence of drug abuse in the United States. NIDA-supported research has yielded information which has altered general concepts about brain function, with major breakthroughs in opiate and opioid peptide research. Studies on the role of neuroregulator systems in the addiction process are also being supported. This research could suggest new treatment approaches and might lead to the discovery of a new class of pain-relieving agents as effective as morphine but without addiction potential.

Alcoholism and Alcohol Abuse

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) is the federal institute responsible for supporting research on alcohol abuse. Alcohol problems take a heavy toll on the nation's economy, costing in excess of $116 billion annually. Alcohol is associated with the loss of 100,000 lives and traumatic injuries annually. The adverse health consequences of alcohol abuse cover a wide range of impairments and disease, from effects on fetal development to debilitating brain damage. The recent Epidemiologic Catchment Area Study showed that clinically-significant alcohol problems are among the most prevalent of psychiatric diagnostic categories. Through research, progress is being made in the fight against alcohol problems. An explosion of basic biological knowledge about alcoholism is offering new opportunities for investigation into the causes of alcoholism. Genetic research, metabolism research, and treatment assessment research are making significant contributions to the general knowledge in biological, behavioral and medical sciences. We again call to your attention a 1980 Institute of Medicine report "Alcoholism and Alcohol Related Problems: Opportunities for Research" which includes an extensive list of worthwhile directions for alcohol-related research.

Childhood and Adolescent Disorders

Childhood and adolescent disorders cover a broad spectrum of disorders that include autism, schizophrenia, depression, anxiety, attention deficit disorders, conduct disorders, psychiatric disorders occurring in the mentally retarded/developmentally disabled, and psychophysiological illnesses such as anorexia and bulimia. About 2 million children have such severe mental disorders that they require immediate care; another 8 to 10 million need help but less urgently; yet, only 500,000 of them receive any kind of treatment through the current mental health care system. Research on childhood and adolescent disorders is progressing but still trails far behind other parts of the biobehavioral sciences. These disorders require the broadest possible perspective, for they occur in the context of interconnections among a child's constitutional endowment, mental development, physical health, and family and social environment.

Mental Disorders of the Elderly

About 25 million people, or 11 percent of the U.S. population, are over 65 years of age. By the year 2000 that number will double. Mental problems are unusually common in this age group (particularly among those of advanced years). Depression is a relatively frequent and often unrecognized problem among the elderly, contributing to the high suicide rate within this population (18.5 per 100,000 versus 12.6 per 100,000 for all ages). Five percent of the nation's aged live in institutions. Of these, about 12 percent are in mental hospitals, with the remainder in nursing and other types of homes for the aged and chronically ill. This population is frequently in need of mental health services for major mental impairments, particularly senile dementia.

Focused support for research on mental disorders of aging is needed. Studies presently funded are devoted to general areas of support including epidemiology, clinical research, treatment assessment studies, services research, and prevention and behavioral studies. Senile dementia of the Alzheimer's type strikes more elderly people than any other brain disease, with an estimated 4 to 15 percent of the over-65 population affected. The pace is accelerating rapidly in the search for treatments for Alzheimer's disease. Evidence suggests that Alzheimer's disease is associated with the impaired function of neurons that use the chemical messenger acetylcholine. Developing an understanding of the neurobiological causes of the dementias is ongoing and must be continued.

Anxiety Disorders

Recent ADAMHA studies reveal that anxiety disorders are the most prevalent of all mental health diagnoses, excluding substance abuse. Approximately 8 percent of the United States population, or some 13 million adults, are affected, with phobia by far the most prevalent form. Anxiety disorders can have crippling effects on individuals, occuring on its own or as part of other psychiatric disorders, including depression, schizophrenia, organic brain syndrome, senile dementia, and substance abuse. Anxiety may also accompany physical disorders with evidence that it can aggrevate such illnesses as hypertension, heart disease and peptic ulcers. The past 25 years have seen major advances in treating anxiety disorders. Treatment research is now focused on establishing the efficacy and safety of psychotropic and biological agents, physical methods, and psychotherapies and education therapies. Behavioral therapies also have proven to be effective for many patients with these disorders.

The Chronic Mentally Disabled

Chronic aspects of mental illness and addictions are extremely important for society. As knowledge about and treatments for these disorders has improved, those interested in care of the mentally ill and addicted have become increasingly concerned about the large number of chronic, untreatable ill. Some chronic forms of depression, psychosis, anxiety, and addiction simply are not amenable to existing interventions. Chronic mental illness imposes enormous drains on community resources for health care, social services, and economic aid. Chronic abuse of various drugs and alcohol exacts penalties that range from serious physical illness to changes in behavior, including criminality. Patients with chronic mental illness who require prolonged hospitalization cost taxpayers tens of thousands of dollars a year, but outpatients also create substantial expenses. We agree with the IOM that while solutions are not readily apparent, research is one key.

Research is progressing on these and other the many areas with which the ADAMHA is concerned. More information, however, is clearly needed, particularly about biological aspects of these disorders and about treatment. Also needed is basic research on developmental processes and the ways in which commonly used drugs can affect them. For disorders that may require prolonged or even life-long treatment, clinicians need more effective and safer drugs to offer their patients. The role of psychosocial interventions is also becoming clearer.

I know that this Subcommittee appreciates that the dramatic research advances of recent years, for instance the development of such a strikingly cost-effective therapy as lithium for manic-depressive disorder, do not come about quickly or independently of a broad base of sustained and carefully nurtured scientific effort. Today, the research enterprise in the biomedical and behavioral sciences requires an increasingly sophisticated technological base and an ever-widening range of highly skilled scientific expertise. It requires the painstaking assembly of complex laboratories and specialized teams of basic and clinical researchers drawn from many scientific disciplines, arrangements which often take years to build and are highly vulnerable to sudden reductions in funding levels. We feel the most reliable predictor of future scientific gains in a field is the recent track record of accomplishment with respect to new research findings and the development of fundamental new methods and techniques of investigation.

Research Training Requirements

Basic scientists and clinical investigators are the essential instruments of research progress. Their training is long and expensive as the extent of scientific knowledge and research technology has expanded. Because of the years of training required, five to eight graduate and postgraduate years, there is necessarily a long lead time in producing highly qualified investigators. If the present promise and pace of research into mental illness, drug abuse, and alcoholism is to be realized and maintained in coming decades, we must work to assure the future availability of the research manpower upon whom the nation will depend for the success of that effort. Fifteen years ago ADAMHA supported nearly 2600 research trainees, many of whom are today's research leaders. This number has steadily declined in recent years and, under the Administration's proposal, will drop to 984.

The National Academy of Sciences in its 1983 Report, "Personnel Needs and Training for Biomedical and Behavioral Research" has recommended 1800 research trainees for ADAMHA in FY 1986, while others in the scientific community make it clear that research training should be minimally supported at no less than 7% of the funds available for research. NIMH, NIDA and NIAAA are strikingly below this minimum.

Mr. Chairman, to begin to reverse the long and dismaying downward trend in numbers of research trainees, and to take an initial step to safeguard the future national capacity for quality research in mental illness and in alcohol and drug abuse, the APA requests your support for an appropriation in FY 1986 to support the training of at least 1300 scientists (approximately 1100 by NIMH and 100 each by NIDA and NIAAA) which includes clinical researchers, biological and behavioral scientists and epidemiologists and prevention-related researchers. Each of these Institutes should be training more future scientists than we propose, but we feel that this number represents a minimal first step in correcting a problem that has steadily worsened in recent years.

SUMMARY

A summary of our alternative set of recommendations for appropriations for ADAMHA research activities follows:

	FY'84	FY'85	President's Budget FY'86	Current Services FY'86	FY'86 APA
			(in $ millions)		
Research					
NIMH	$173	$196	$190	$224	$252
NIDA	$ 59	$ 64	$ 68	$ 74	$ 79
NIAAA	$ 42	$ 49	$ 52	$ 62	$ 68
Research Training					
ADAMHA	$ 17	$ 21	$ 21	$ 22	$ 28.4
(Trainees)	(937)	(984)	(984)	(984)	(1300)

We feel that these recommendations -- only modestly in excess of "no growth" or "current services" levels -- are clearly justifiable in light of the problems within the ADAMHA domain and the progress underway.

We urge the Congress to make this necessary investment in ADAMHA research and research training. Thank you for this opportunity to testify.

STATEMENT OF DALE P. DIRKS, WASHINGTON REPRESENTATIVE, AMERICAN MENTAL HEALTH COUNSELORS ASSOCIATION

Senator WEICKER. The next witness is Dale Dirks, Washington representative for American Mental Health Counselors Association.

Dale, I am going to let you go ahead and start your statement. Somebody will inform the floor that I am going to be a couple of minutes late.

Mr. DIRKS. I will try to take as little time as I can.

The American Mental Health Counselors are pleased to appear before your subcommittee to respond to the President's budget for fiscal year 1986 for programs related to mental health and counseling.

Mental health counselors are a new breed of professionals. It is clear by the phenomenal growth rate of this organization, over 15 percent per year, that over 10,000 members are committed to supporting the endeavors of the profession of mental health counseling.

Mental health counselors perform mental health counseling in many settings, including private practice, community mental health centers, colleges and universities, hospices, and other State and Federal agencies.

Mental health counselors often work along with other core providers to provide complementary and interdisciplinary mental health services best suited to a client's needs.

Education and training can be received from counselor education, mental health counseling, or community counseling programs at regionally accredited universities at the master's, specialist, and doctoral level. The master's degree is considered the entry level degree for the practice of mental health counseling, with the doctorate degree seen as the credential for the training or supervision of mental health counselors, or for specialized training and research or advanced techniques.

Mental health counselors are required to demonstrate competency through certification by the National Academy of Certified Clinical Mental Health Counselors. As has been the case with some other mental health professionals, obtaining State licensure is a State-by-State process. Currently, 10 States have enacted licensure laws, and bills are pending in 28 other States.

Mr. Chairman, clearly, as evidenced by the recent Institute of Medicine's report, entitled "Research on Mental Illness and Addictive Disorders: Progress and Prospects," an increased national effort is in order to address the continuing perplexing issue of mental disorders, personal problems, and social stress. Research into the causes, and treatment of mental disorders must continue to accelerate, particularly when it has become evident that there is more reason now than ever to believe that much can be done to combat these disorders and that they can be treated effectively.

Similarly, it is critical that there exist a commitment of Federal resources to train top mental health professionals of all disciplines. This includes basic and clinical researchers, psychiatrists, psychologists, social workers, psychiatric nurses, mental health counselors, and paraprofessionals. Through basic research and clinical research, opportunities to understand the causes of mental illness, and avenues to treatment will expand rapidly.

Clinical professional training funds will insure adequate numbers of professionals to deal with the ever increasing number of individuals who suffer mental and crisis oriented disorders that are being identified, including many senior citizens, children, family groups, and the chronically mentally ill.

The alcohol, drug abuse, and mental health block grant is the singular most important source of funding for actual alcohol and drug abuse treatment, and community mental health services throughout the States in the Nation. As the number of those who receive services increases dramatically each year, the Federal commitment of resources must also increase.

The American Mental Counselors Association views the President's budget as an attempt to strip the Alcohol, Drug Abuse, and Mental Health Administration of its ability to address with the type of resources necessary an area that is sorely in need of attention.

Additionally, the proposed forward-funding scheme is viewed by the American Mental Health Counselors Association as an ill-conceived means to circumvent the intent of Congress, and a noncourageous way of reducing future funding and grant obligations.

The American Mental Health Counselors Association is pleased to join with the nearly 30 national professional associations and organizations who have endorsed an alternative budget for ADAMHA. We think this alternative budget more adequately reflects the needs of the mental health community.

When I speak of the mental health community, I am not talking about the mental health counselors, Mr. Chairman, I am referring to the millions of Americans throughout the Nation who suffer mental disorders and problems, and who are in critical need of the many resources provided through your committee.

Following is a summary of our recommendations for fiscal year 1986.

PREPARED STATEMENT

Senator WEICKER. I thank you very much, and your statement in its entirety will be printed in the record.

[The statement follows:]

STATEMENT OF DALE P. DIRKS

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Addictive Disorders: Progress and Prospects", an increased national effort is in order to address the continuing, perplexing issue of mental disorders, personal problems, and social stress. Research into the causes, and tréatment of mental disorders must continue to accelerate, particularly when it has become evident there is more reason now than ever to believe much can be done to combat these disorders and that they can be treated effectively.

Similarly, it is critical that there exist a commitment of federal resources to train top mental health professionals of all disciplines. This includes basic and clinical researchers, psychiatrists, psychologists, social workers, psychiatric nurses, mental health counselors and para-professionals. Through basic and clinical research, opportunities to understand the causes of mental illness, and avenues to treatment will expand rapidly. Clinical professional training funds will insure adequate numbers of professionals to deal with the ever increasing number of individuals who suffer mental and crisis oriented disorders that are being identified, including many senior citizens, children, family groups, and the chronically mentally ill.

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Following is a summary of our recommendations for fiscal year 1986. I am pleased to respond to any questions you may have.

AMHCA RECOMMENDATIONS FOR FY'86

National Institute of Mental Health

Research :	$252.8 million
Research Training:	24.1 million
Clinical Training:	26.0 million

National Institute on Drug Abuse

Research :	$79.6 million
Research Training:	1.6 million
Clinical Training:	1.0 million

National Institute on Alcohol Abuse and Alcoholism

Research :	$68.7 million
Research Training:	2.7 million
Clinical Training:	1.0 million

ADAMHA Block Grant

$545 million

STATEMENT OF ELEANOR S. KOHN, MEMBER, PUBLIC POLICY COMMITTEE, NATIONAL MENTAL HEALTH ASSOCIATION

Senator WEICKER. I am going to have to run for this vote. The next witness we have is Eleanor S. Kohn, member of the public policy committee of the National Mental Health Association.

Why don't you come and make yourself comfortable. I am going to leave you right now, but you are not going to start testifying until I get back. This way you are all primed and ready to go.

[A brief recess was taken.]

Senator PROXMIRE [presiding]. The chairman is coming back, but why don't you go right ahead.

Ms. KOHN. I am Eleanor Kohn, and I am from Danbury, CT. I am here as a representative of the National Mental Health Association. I am probably going to surprise you because I am not going to ask for support for adequate funding, I think that we already have that support from this committee.

I am going to tell you something. I am going to tell you that there are 1 million mental health patients and volunteers behind you looking to this committee because we feel that this committee has been a firm advocate for the kind of programs we are hoping for. We are looking to this committee to carry the message and the fight to the Senate floor to see that these kinds of programs have some adequate funding.

When I was here last year, Senator Weicker said to me, "The committee agrees with you, Mrs. Kohn, but the public is dead in the water." I am not sure that it is very smart to disagree with the chairman of the committee before whom you are testifying, but I think this year I will disagree.

Senator PROXMIRE. You can, you are one of his bosses.

Mrs. KOHN. A Gallup Poll just released some results of a poll that they conducted just this month in which they asked: What should we cut to reduce the deficit, and far and away, the first item in the response was the military spending.

I would like to read to you two items that I have collected from the New York Times. "The United States spends hundreds of millions per weapon for training manuals," and it went on to quote a Pentagon study on the cost of these manuals for which the contractors are getting $500 to $1,200 per page. On the B–1 program, $1,000 per page translates to $1.2 billion, on the F–18 fighter, the manual charge would be $800 to $900 million.

A January 18 item indicated that the recruiting commercial aired by the Marine Corps during the Super Bowl game cost something in the range of $500,000.

When one measures that against the $252.8 million that is being asked for mental health research, I think that we see the kind of disparity in funding.

The deficit has to be reduced, we all know that as taxpayers, but we are asking this committee to stand firm in your conviction that there is major importance in funding the kind of programs we are talking about.

Last February, Senator Weicker spoke in New Haven, and I was almost tempted to bring that testimony here. He said, "We want investment in life, investment in the future of this society is no pie-in-the-sky exercise for the Federal Government, it is hardnosed, pragmatic approach to the future."

When the United States invests in biomedical research, it does so knowing full well that every dollar invested, $13 will be saved in Medicare and Medicaid costs. Considering the kind of impact that mental illness has on Medicare and Medicaid, it is obvious that the hardnosed, pragmatic approach to reducing the costs has to come by putting in a more equitable allocation into research to prevent, treat, and cure those illnesses.

We also would like to talk with you for just a moment about the Federal investment in services. We were very impressed with the work that the Subcommittee on the Handicapped did in uncovering the unspeakable conditions that they found in some of the long-term care institutions around the country. The same kinds of unspeakable conditions exist in communities.

There are homeless mentally ill patients who are equally as vulnerable, if not more vulnerable, to the kinds of problems, and we are asking that $5 million of the Community Support Program be identified to find ways of helping that particular population.

We are also hoping, of course, for some additional money for working with the elderly, for working with children who have emotional problems.

There is just another figure that I would like to throw out to you. There have been 200,000 children identified in this country as having autism. It is costing $30,000 a year to take care of each one of those children, and those children need a lifetime of care. We are talking about billions and billions of dollars to care for that population. They are the ones who have been identified up until now.

If we can find some way of intervening, and that is not just a possibility, it is a probability now, given what has happened in research—if we can find some way of intervening, we will make major, major progress in reducing the staggering costs of medical care. Those are the kinds of things that we are asking this committee to do.

We know of your interest, we know of your support, we appreciate it. We want you to know that we are behind you when you go out there fighting for these kinds of issues.

Senator PROXMIRE. May I say, Mr. Chairman, that Mrs. Kohn quoted the most authoritative possible source. She quoted Senator Lowell Weicker in a speech at Yale, and the quote was very, very convincing. She couldn't quote a better source.

Mrs. KOHN. I figured that.

Senator WEICKER. Ever since I gave that speech at Yale, every time I get on an airplane in Connecticut, Eleanor is on board that plane.

[General laughter.]

Senator PROXMIRE. From the way she is speaking, she was probably piloting the plane.

Senator WEICKER [presiding]. She doesn't mean to take any chances.

Mrs. KOHN. We have met so frequently that I had to assure him that I was seeing more of him than I was seeing of my husband these days. But this morning, I have brought my husband along.

PREPARED STATEMENT

Senator WEICKER. Thank you very much. I appreciate it.

[The statement follows:]

STATEMENT OF ELEANOR S. KOHN

This statement is submitted on *behalf of the National Mental Health Association* (NMHA) a nationwide, voluntary, nongovernment organization dedicated to promoting mental health, preventing mental illness and improving the care and treatment of mentally ill persons. We have 650 chapters and state divisions and more than one million citizen members and supporters working toward these goals, providing social action, advocacy, education and information programs. Of special concern to us this year is the Federal investment in mental health research and in the Community Support Program. We see both of these programs as efforts with tremendous potential for restoring mentally disabled individuals to productivity and, eventually, for preventing the onset of the diseases called mental illnesses.

As taxpayers, we share your deep apprehension about the implication of mounting deficits, non-productive expenditures and the urgent necessity of moving the nation toward fiscal stability. We are aware that rising medical costs are causing anxiety and that you have the unenviable task of finding ways of containing those costs. In carrying out this responsibility, it is imperative that you deal with the impact of the mental illnesses on these expenditures for the relationship is strikingly relevanc.

1. 25% of all hospital inpatient days in the U.S. are for mental disorders. Six billion dollars annually are the conservative estimates of direct costs for these hospitalizations. Schizophrenia accounts for 40% of all long term care days, compared with 27% for cardiovascular disorders. 20% of all Social Security Disability days are related to the diagnosis of schizophrenia.
2. There are 200,000 autistic children in the U.S. needing full time residential care at an average cost of $30,000 per child per year or $4 billion yearly. As long as those children and the additional numbers being diagnosed each year continue to require care, most of it funded by public dollars, the outlay will be astronomical.
3. The recipients of mental health services suffer more chronic health diseases, are physically sicker and utilize more general medical services than people who do not need psychiatric services.

4. Conservative estimates suggest that mental disabilities and addictive disorders affect 30 to 40 million people, are estimated to cost between $20 and $30 billion annually in direct health care expenditures and $190 billion in total economic costs.
5. The aging of the population is resulting in major increases of Alzheimer's diagnosis. One-half of the country's nursing home beds are used by Alzheimer's patients and at least twice as many victims are being cared for by families. This kind of care often results in the complete emotional and financial impoverishment of the caretakers, most frequently culminating in the loss of significant tax revenue from them and the subsequent expenditure of public dollars. GAO studies estimate direct costs of this long-term care at $14 billion and we still don't know the cause of the illness!
6. There is a growing body of research affirming the cost offset effect of providing mental health services to hospitalized medical patients, particularly the elderly.
7. The Surgeon General has estimated that half of the country's mortalilty rate from ten leading causes of death are related to behavior and lifestyle, issues which are inextricably linked psychological factors.

The logical conclusion to be drawn from compelling data such as these is that mental illness and the psychological components of physical illness are major contributers to soaring medical costs in the country and therefore, reduction in incidence, prevalence, severity or length of mental disability can result in massive savings of both public and private dollars.

Based on this premise and recognizing the importance and urgency of your need to find ways of eventually reducing, by significant amounts, the high cost to the public of caring for those afflicted by various forms of mental and emotional disabilities, we are asking you to consider reasonable increases in the NIMH research appropriations. The promise of preventing mental diseases, of limiting disability and of cure is no longer wishful thinking. The knowledge explosion of the past 5 to 10 years has brought a glimmer of light into many lives which were bereft of hope before. Mine is one. My brother died of Alzheimers. The family stood helplessly by watching him deteriorate and now, his children and I feel as though we are in a race against time given the very high familial vulnerability which is a known characteristic.

The 30 to 45 million of us, whose lives are disturbed by a range of mental disorders, have a vital stake in urging you to invest a more equitable share of public dollars in mental health research. Appalling disparities have continued for many years in the allocation of research funds. Thirty times more is spent on research for each patient under treatment for cancer than for patients being treated for schizophrenia.

Additional investment in the mental illnesses has and will pay off. In example, if research were to produce some interventions to reduce schizophrenia costs by only 10% -- a highly realistic expectation -- we could realize a cumulative savings of $180 billion over the ten years following the introduction of that intervention. That is an exciting possibility and given the progress of the past few years, it is also a probability.

For decades, we have been told that the mental health research field could not productively use a more equitable share of Federal research dollars because the quality of research being produced was not up to that in other fields of medicine. If it were true at any time, it is certainly not true now. Of all NIH Institutes, the NIMH Intramural program ranks second in the percentage of its senior scientists elected to the National Academy of Sciences. The prestigious Flemming Awards for young career scientists have, in the past 6 years, been given to four NIMH researchers as compared to five in all the other Institutes. Of scientific papers most frequently cited--a measure of the impact of the work in the scientific arena--NIMH is tied for second place among the Institutes on a per capita basis. Three Lasker Awards and a Nobel prize have also been captured by NIMH. There can certainly be no question about the superior quality of research being produced by these highly recognized investigators.

In addition to research, our second major concern is the allocation to the Community Support Program in the 1986 budget. Senator Weicker, we applaud your recent initiative in examining the quality or lack thereof of institutional care now being offered mentally ill and mentally retarded persons around the country. We are greatly encouraged by and supportive of your determination to improve it. The abuses which your staff uncovered in the system provide still another strong rationale for our long standing support for the development of a continuum of services which includes long-term residential care but has a major emphasis on the expansion of community based programs. The opportunity for mismanagment and abuse is drastically lessened when services are open to public scrutiny and accountable to community pressure.

It is vital that patients' rights be protected and that ongoing and objective evaluation of institutional services be required. In addition, care must be taken to assure that that protection encompasses the provision of the most appropriate treatment in the most appropriate setting. Some patients may need hospitalization but there are presently many institutionalized patients who do not require and cannot benefit from that kind of placement. To keep them there for lack of more appropriate care is both a gross violation of their rights and an unwise expenditure of dollars.

The Federal government has a substantial and influential role to play in assuring the availability of appropriate care. Through the Community Support Program, innovative approaches to the provision of such services are being demonstrated, evaluated and replicated. A December, 1984 report on the program indicated:

1. There was an approximate 50% reduction in the amount of hospitalizations per year among CSP clients served in local demonstration areas.
2. In almost all states, psychosocial rehabilitation oriented programming resulted in significant decreases in rehospitalization and increases in clients living independently and working in sheltered workshops and competitive employment situations.
3. Although there are still great unmet needs, community residential placement in a number of states participating in the CSP demonstrations increased two to five fold.
4. Case management services, essential to maintain people with a long-term mental illness in the community, increased significantly in approximately one-half of the states with CSP grants.
5. Each dollar of CSP grant funds leveraged approximately $18 of state, local, private or other funding for this population.

CSP is successfully meeting its goals of improving community services and access to them for inappropriately institutionalized adult chronically mentally ill clients. It is the only Federal program specifically targeting funds toward improving services for this population as well as for severly mentally ill children.

The obviously rational response to these demonstrated successes is an increase in funding for additional needy populations so they, too, can be better served and the cost of caring for them reduced. We are asking for $20 million to expand the CSP to include additional programing for severely mentally ill children and adolescents, (among whom teen age suicides are the third leading cause of death), elderly persons who are mentally ill, and mentally ill people who are homeless and who are undoubtedly the most vulnerable and disabled of the homeless population.

There are shrill demands to reinstitutionalize this latter group. That is a quick fix and inappropriate solution to a long term and complex problem. For all but a few patients in acute episodes, it offers little more than a revolving door. Research, technical assistance, demonstration and evaluation programs are urgently needed to find ways of providing the range of services necessary to help those who can function independently and to the best of their capacity in the community.

Because treatment of chronicity in mental illness usually extends beyond hospital walls and involves social services, legal systems, housing programs as well as the provision of medical care, governmental responsbility at many levels cannot be overlooked. The Federal government has a crucial role to play in the development of this comprehensive system. It is a role which cannot be duplicated at state or local levels. In addition, much of the positive pay-off from successful CSP programs will be reflected in lowered Federal expenditures, therefore, efforts to expand CSP deserve Congressional support.

Supporting the CSP effort is the new State Planning program to allow interagency planning of services for these vulnerable populations. The Administration has requested no funding for this new initiative in 1986, and we urge the Committee to continue its commitment in this important area by appropriating $5 million.

An April 1st headline in the New York Times read: "U.S. Spends Hundreds of Millions Per Weapon for Training Manuals" and went on to quote a 1982 Pentagon study on the costs of these manuals for which contractors are getting $500 to $1200 per page: "...on the B-1 program, $1000 per page translates to $1.2 billion, on the F-18 fighter the manual charge would be $800 to $900 million. Million-to-one tank costs are 'comparable but higher'," and the study said the trend would continue. Another clipping notes Sen. Warner's incredulity and outrage at a plan to spend $30 million to modify the Army's communication system because it was discovered that the present system was incapable of communicating with the Air Force.

A January 18 item indicated that a 30-second recruiting commerical aired by the Marine Corps during a Super Bowl game cost something in the range of a half-million dollars! Still another reported that a Scientific Advisory panel had recommended that NASA abandon the idea of a manned space platform as too expensive and potentially no more productive than an unmanned one. NASA decided to ignore the advise of its panel and move ahead with plans to people the platform at enormous cost.

Without question, Congress has a responsibility to work toward a reduction of the deficit. To accomplish that, bloated budgets, unconscionable profit-making, wasteful, poorly planned programs such as these must be brought under control. To attempt to reduce the deficit by, once again, cutting already underfunded, productive programs is neither rational, prudent nor humane.

Last year, in offering a floor amendment to the budget, Sen. Weicker reported that for every dollar we spend on health research, we save $13 on health costs. We are aware and appreciative of this committee's willingness to speak out for health needs in a time of budgetary austerity. We agree that across the board cuts are unfair and, in the long run, fiscally imprudent. We urge this committee to continue its forceful advocacy for a greater commitment of our nation's resources to be used to assure the health and quality of life of its citizens. You will have one million members and supporters of the NMHA backing you on that.

Measured against the cost of mental illness in suffering, dollars and lost productivity, and the promise of progress which now definitely exists, we believe our attached recommendations are both reasonable and realistic. We know you will give them serious consideration. Thank you.

MENTAL HEALTH PROGRAMS
(in millions of dollars)

PROGRAM	FY 1985	CURRENT SERVICES FY 1986*	PRESIDENT'S REQUEST FY 1986	NMHA RECOMMENDATION FY 1986
Research	$196.2	$224.1	$190.2	$252.8
Demonstrations (Community Support)	10.5	11.0	-0-	20.0
Alcohol, Drug Abuse & Mental Health Block Grant	490.0	515.0	490.0	545.0
State Planning	2.5	2.6	-0-	5.0
Research Training	18.0	18.8	18.0	24.1
Clinical Training	22.0	22.0	-0-	26.0
NIMH Direct Operations	34.426	36.467	31.735	38.208

*estimate of required budget authority assuming no policy changes from fiscal 1985

STATEMENT OF F. THOMAS JUSTER, PH.D., CONSORTIUM OF SOCIAL SCIENCES

Senator WEICKER. The next witness is Dr. Thomas Juster of the Consortium of Social Sciences.

Mr. JUSTER. Thank you, Mr. Chairman. I should note that the listing in the record is somewhat miscast. My testimony is on the Assistant Secretary for Planning and Evaluation budget, and not on the ADAMHA budget. There is both good and bad about that. You trade 10 of millions for hundreds of millions in terms of the numbers that we are talking about. It is a little out of sequence in terms of your own proceedings, and I should note that for the record. Apparently, it was a mix up in terms of the schedule.

Senator WEICKER. No problem.

Mr. JUSTER. Let me summarize briefly the prepared statement, and then let me make a few additional comments.

As I see it, the role of the Assistant Secretary's Office in the research process in Health and Human Services is quite crucial. Basically what it does is to produce high quality applied research which is focused on two kinds of problems: current policy issues which cut across the agencies of which ASPE is the top and the others are operating; and, more importantly, it has an important role in producing a knowledge base which one needs to have for long term policy perspective.

If you look at the recent trajectory of the ASPE budget, essentially what happens is that it has gone by about 75 percent since 1980. It is down again this coming year. A lot of that trajectory appears to come out of the recommendations of the Grace Commission, which essentially said that research in the HHS should be focused at the level of the operating agencies, and that ASPE should by and large be eliminated.

That is a curious argument for a commission comprised of people who come from the business sector. It is essentially very similar to saying, if you were General Motors, what you ought to do is to cut out corporate headquarters research on long-term demographics, on long-term trends in preferences, on things that affect the long-term demand for cars, and put all the money into Chevrolet's and Pontiac's next month market research budget. That wouldn't be good stragegy for them, and I suggest that it is equally bad strategy for the HHS.

Basically, what I have to say on the APSE budget is that the functions, as I see them, are important functions, and they cannot be done with the 1986 budget request. They can't be done adequately, especially the function which relates to improving the long-term knowledge base. Let me just give you two aspects of that from the ASPE budget request.

For both income security policy and retirement policy, the ASPE budget request is $750,000. That seems, perhaps, like a large sum. In research terms, particularly long term research terms, it is far from adequate.

To illustrate that, a single project which ASPE supports, which happens to go to deal with the institution that I direct, which Institute for Social Research at the University of Michigan, a single project for which ASPE provides part of the support, most of it comes from the National Science Foundation, would take about one-half of the total ASPE budget request for the entire area of income security policy.

For retirement policy, again a single project, which happens to be conducted at the Institute for Social Research, which I am involved with, would require, if it were done properly, twice the total level of next year's budget request for ASPE.

It just so happens that that project is not ripe for continuation for 2 more years, but it doesn't mean that it wouldn't be done. It does mean that the scale of the ASPE request in those two areas seems to me to be rather low by a factor, rather than low by a percentage.

Another illustration which I just recently came across, which makes the same point. I recently saw a request for a proposal from ASPE which came out 2 or 3 days ago. It is a very interesting request for a proposal, what it asks about is to try to get people who understand the role that the kind of working conditions and job characteristics people have, what contribution they make in the retirement sense. This is a very important issue. We are going to be having dramatic changes in the kind of jobs that people are doing over the next several decades, less in terms of manufacturing and routine, more in terms of services. One needs to know something about the job characteristics, whether it is dull or interesting, challenging, or physically demanding, and what kind of role they play in the people's decision to retire.

The subject is important. The RFP is well-written. An important subject is well-thought through, but the total resources proposed to investigate that subject are $150,000, and a maximum slice of $75,000. The proposal recognizes that there are no data with which that problem can be examined, not adequately, but yet it tries to make a start on an important problem, and because of budget constraints, I assume, puts a limit on what can be asked for, or what is requested, at a level which, quite frankly, might yield interesting insight, but which will not yield the kind of results that the subject requires.

It is a long-term problem that requires a lot of resources, and it cannot be accommodated with that kind of budget.

Let me outline another couple of things that I think we have learned.

Senator **Weicker**. Dr. Juster, you have gone 1 minute over, and we still have a great number of people left to testify. So if you would please wrap it up.

Mr. **Juster**. Let me just briefly say that if you asked me what is an optimal level for a budget request for ASPE, I would say two things about it. The HHS is roughly a $400 billion agency, $6 million for long-term and short-term policy research strikes me as a quite modest number. In fact, I think it is too low.

I don't know what the right number is, but I would suggest that realistically a number like $8 to $10 million would be significantly more appropriate and would enable significant initiatives to be made which cannot now be made.

In general terms, my basic argument is that if ASPE regards itself as having the function of trying to improve in a serious way the long-term knowledge base for retirement policies, for dependency and poverty policies, for health policies, it cannot accomplish that on a budget of $6 million, particularly where the trajectory appears to be headed for zero.

This committee, I think, should vote to increase the level and should change the trajectory, both are critical, the second not the least critical.

PREPARED STATEMENT

Senator **Weicker**. Dr. Juster, thank you very much. Your statement in its entirety will be included in the record.

[The statement follows:]

STATEMENT OF DR. F. THOMAS JUSTER

I am pleased to have this opportunity to testify before the Subcommittee on Labor, Health and Human Services, and Education of the Senate Appropriations Committee. I represent not only my own institution, the Institute for Social Research at The University of Michigan, but also the Consortium of Social Science Associations (COSSA), who represent the views of the over 175,000 social and behavioral scientists affiliated with COSSA through their disciplinary and professional organizations. A list of COSSA members, affiliates, and contributors is attached to my statement.

My testimony concerns the FY 1986 budget request for the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in the Department of Health and Human Services (DHHS).

The budget request for ASPE comes to $6.0 million, a substantial decline from last year and a decline of 75 percent since FY 1980. The justification for this reduction in the ASPE budget appears to be the recommendation of the Grace Commission on research functions in the DHHS. The Grace Commission recommendation, in essence, is that research activities in DHHS should be focused in the operating components, e.g., the Social Security Administration (SSA), the Health Care Financing Administration (HCFA), the Office of Human Development Services (OHDS), and the Public Health Service (PHS). The Commission's view is that ASPE research should be phased out over time, presumably to be replaced by more sharply focused research activities in the operating areas of DHHS.

There are two basic problems with this scenario. The first and most obvious is that the Administration budget requests for the operating components of DHHS have been reduced rather than increased, and some of them are reduced substantially. For example, the budget request for HCFA is down almost 40 percent from last year, and down by more than half (in current dollar) from its FY 1980 level. The budget request for OHDS is down by more than 40 percent from last year, and by over two-thirds (again in current dollar) from its FY 1980 level. And the budget request for SSA is down by over 10 percent from last year (I do not have comparable data for a comparison against 1980).

Thus the pattern of Administration budget requests for the set of research activities in DHHS is entirely clear, but it does not consist of phasing down ASPE in order to shift research functions to the operating components. Rather, it consists of cutting back on research functions generally, and cutting the ASPE budget to the point where it becomes questionable whether a serious and sustained program of long-term integrated research in areas of concern to DHHS can be effectively sustained.

The second reason why the Grace Commission recommendation seems to me questionable is that it somehow assumes that research activities in ASPE are just like those elsewhere in DHHS, and putting them closer to operating programs is apparently thought to represent an improvement. But this totally misunderstands the nature of both basic research and of the different missions of ASPE and the operating components of DHHS. In testimony presented last year on the ASPE budget, the Executive Director of COSSA made what appears to me to be an appropriate analogy. Cutting back on research in ASPE in favor of doing more research at the level of operating components is much the same as suggesting that corporate headquarters in General Motors should drop its research programs on the long-term demographic characteristics of the U.S. population, on basic trends in consumer preferences for various types of vehicles, on metallurgy and on the aerodynamic of styling, in favor of doing more market research in the Chevrolet and Pontiac Divisions. If that is how the Grace Commission perceives how American business goes about its strategic planning functions, the Commission's view seems quite wide of the mark.

Of course, DHHS is not a private business, but a public agency. Nonetheless, the same general principles seem to me to apply: there is a subset of problems, of both short- and long-term concern to the DHHS, which are unlikely to be well-handled by focusing research resources at the level of the various component parts of the agency. These include any issues that cut across the domains of the operating agencies, issues that involve long lead times and are therefore apt to be of less concern to units whose major mission is to understand current policy problems and programs, and in general activities that come under the heading of improving a knowledge base from which better public policy decision in the areas of poverty, dependency, health care, aging, disability, etc. can be facilitated.

How many resources does ASPE need to fulfill its appropriate function of advising the Office of the Secretary? That is not an easy question to answer, and the appropriate answer partly depends on what priority DHHS puts on accurate information about the consequences of programs, on accurate insights about the behavioral responses of the population to various programs, and on reliable methods of characterizing the longer term dynamic of movements in the subpopulation of special concern to DHHS (the aged, the disabled, the dependent, etc.).

The Committee needs to recognize that, while different administrations will have different preferences about how much research and information they want, all administrations need a certain amount, and all administrations ought to provide for the future knowledge and informational needs of administrations to come. Measured by those standards, it seems to me that the ASPE budget has been cut to a dangerously low level. Not only does that budget request have to provide for the kind of short-term guidance that can be obtained by commissioning studies based on existing knowledge, i.e., channeling the best of our current wisdom into an analyses of policy relevant alternatives, but it also needs to carry on sustained programs of research that have long-term payoffs—the development of a better understanding of how important elements of society are likely to fare in the intermediate and longer term future, given current programs and both public and private policies.

The short-term (collecting the current wisdom) function is not unimportant, and deserves a role in the ASPE menu of activities. But the longer term activities are equally crucial, and it is those that are most likely to be shortchanged by the budget request for FY 1986. And although it has been argued before this Committee that ASPE is no longer doing expensive experimental research, and that some current major programs are winding down, these arguments suggest only that an appropriate budget request for ASPE might be substantially smaller than it was in 1980, not that it ought to be only one-fourth the 1980 level in current dollars. To put the problem into perspective, DHHS is responsible for something like $375 billion of public expenditures, much of it outlays of the Social Security System. A $6 million budget request seems rather modest, to put it mildly.

What would be lost if the ASPE budget request is approved at the $6 million level? While it is hard to be specific, let me note two kinds of activities that will be in jeopardy if the pattern of ASPE funding support continues as it has during the past few years.

The ASPE budget request for FY 1986 contains about $1,450,000 for studies of income security and employment. The two items that comprise this total are welfare policy, where $725,000 is budgeted, and retirement policy, where the same amount is budgeted.

ASPE has for many years provided support for two studies at my own institution. One is probably the most important set of data on the dynamics of income change that exists in the western world--the longitudinal Panel Study of Income Dynamics (PSID). That study was originally supported entirely by ASPE and its predecessor organizations. During recent years the study has (appropriately) been largely supported by the National Science Foundation, but ASPE has continued to make a significant annual contribution because of the enormous benefits that continuation of the study provides by way of insights into the nature of poverty and dependency in the U.S. But the ASPE budget request for welfare policy studies is only a little more than twice the current annual contribution that ASPE makes to help sustain the PSID. It's hard for me to believe that the cost of both data-oriented and policy studies in the area of welfare policy that ASPE ought to be supporting is only a little more than twice the cost of a single study—especially since the ASPE contribution to that study is entirely limited to the collection, not the analysis, of the data.

A similar situation appears to pertain for research on retirement policy, where the ASPE FY 1986 budget is also set at $725,000. About two years ago ASPE provided a major part of the support for a study of the saving behavior of U.S. households—an obviously crucial element in the analysis of retirement policy. The first phase of the study is now largely complete, and the second phase, for technical reasons, will not begin for about two more years. If the study is to continue as originally planned, ASPE will probably have to be a major contributor (along with other agencies like the Federal Reserve Board and the National Science Foundation). But that study alone will cost about twice as much as next year's total ASPE budget in the retirement policy area. Again, it seems to me hard to believe that ASPE's interests and concerns in an area as important as retirement policy can be accommodated with a budget request of the size recommended by the Administration.

I know less about the other areas that relate to the disposition of ASPE's resources--Health, where about $3.5 million is budgeted, and Human Services, where about half a million is budgeted. But I assume that comparable points would be made by people who are knowledgeable about research needs in those areas.

As I read the numbers, the level of support requested for ASPE is inappropriately low, compared to any plausible assessment of what ASPE ought to be supporting. Perhaps even more importantly, the current level of the ASPE budget clearly reflects a decision that the level in future years ought to be even lower, and eventually ought to be zero. That strategy, for reasons that I noted earlier, seems to me appropriately described by a term like foolishness, rather than by some kinder description.

I do not know what an appropriate level of support for ASPE would be in FY 1986, or during future years. But I do think that this committee has an obligation to consider whether the ASPE budget request ought to be increased for this year, and targeted for modest growth in future years, simply on the grounds that the current request cannot possibly accommodate important priorities.

I appreciate the opportunity to testify before this Committee, and I would be happy to answer questions. Thank you very much for your time and attention.

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- Society for Social Studies of Science
- Southwestern Social Science Association
- Speech Communication Association

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- University of Tennessee, Knoxville
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- University of Washington
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- University of Wisconsin, Milwaukee
- Yale University

ADDENDUM STATEMENT

An important question of concern to the Committee is the degree to which research previously funded by ASPE has been useful in furthering the mission of ASPE and the DHHS. Over the last decade or so, most of the comprehensive/state of the art studies of both welfare and poverty have been funded at least in part by ASPE. For example, virtually all of the data collection and analysis of the negative income tax experiments originated through ASPE, as did the majority of the support between 1972 and 1980 for the continuation of the widely used Panel Study of Income Dynamics. ASPE continues to be a moderate supporter of this study, as noted in my statement.

One important question is: what kinds of things has ASPE been doing lately that are important? Although I cannot claim to be comprehensive here, I think it is useful, as a minimum, to detail a couple of examples of the kind of research that ASPE has supported and which is quite important from the point of view of the DHHS mission.

Links Between Welfare and Family Change

Any discussion of the welfare system, or of possible changes in that system needs to be informed by examination of the linkages between the welfare system, and a variety of economically detrimental family changes—divorce, delayed remarriage, births to unmarried mothers, etc. The negative income tax experimental evidence (from SIME-DIME) indicated a substantially higher divorce rate among experimental families, indicating that movement to a negative income tax-type support system might have substantial effects on family structure. But that evidence is not always easy to interpret, and does not necessarily answer all the important questions in this area: for example, to what degree has the current welfare system been responsible for the explosive growth in female-headed families over the past 20 years?

Because states set benefit levels for AFDC, that program provides a very good natural experiment to test whether the level of benefits affects divorce rates, remarriage rates, birth rates, and other family composition decisions. ASPE's study (by Ellwood and Bane) examined these links using a variety of data sources. That study is widely cited as providing the best evidence on this important issue, and has been extensively used to document some of the shortcomings in Charles Murray's recent popular book, Losing Ground. Interestingly, Ellwood and Bane find no effects of the welfare system on birth rates, modest but statistically significant effects on divorce and remarriage rates, and a very large effect on the decision of unmarried mothers to live independently or to live with their parents. The findings make good sense: the progression of effects show that AFDC benefit levels are most important for the most economically-based decisions, least important for decisions where economic considerations play a less important or minor role. Their overall conclusion, "differences in welfare do not appear to be the primary cause of variation in family structure across states, or over time" is an important one from the point of view of the DHHS policy formation.

Duration of Welfare Spells and Contamination

A second ASPE study, also by Bane and Ellwood, uncovers an interesting statistical paradox that also seems to characterize the duration of spells of poverty, unemployment, and hospitalizations. The paradox is that the length of spells for those who come into contact with the welfare system are typically very short, but the typical length of spells for those observed to be on the welfare system at any particular point in time are quite long. The first statistic addresses the question of whether contact with the welfare system induces dependency, and the answer seems to be: no, it does not. The second figure has implications for the allocation of program resources, since it suggests that a relatively small number of recipients will typically account for the bulk of program expenditures.

Welfare Dependency

A study by Hill and Ponza (an ASPE study) addresses the important question of whether welfare is passed along from one generation to the next. For black women, the answer is unambiguous: no, welfare dependency is not passed on from one generation to the next. The attached table shows the evidence, and although the comparisons shown there are quite simple, they hold up in extensive multivariate analysis. The data show that

80 percent of black women who come from heavily welfare dependent homes are not themselves heavily dependent on welfare after leaving their parental home. And this dependency figure--80 percent not dependent--is not very different from the comparable statistic for black women coming from parental homes in which no welfare was received at all. The picture is somewhat cloudier for white women, and there is some indication that welfare dependency exists for that group.

INTERGENERATIONAL TRANSMISSION OF WELFARE DEPENDENCY
BLACK WOMEN

	Status of Children as Young Adults			
Parental Welfare Status	Received No Welfare	Low Welfare Dependence	High Welfare Dependence	Total
Received no welfare	53%	33	14	100%
Low welfare dependence	31%	49	20	100%
High welfare dependence	42%	39	19	100%

Note: "High Welfare Dependence" is defined as receiving at least 25% of average family income as cash welfare payments. Parental measures are typically averaged over seven years during the time the child is 10-16 years old. Measures on the children as young adults are typically measured over seven years during the time the child is 24-30 years old.

Source: Martha S. Hill and Michael Ponza "Does Welfare Dependency Beget Dependency?" Institute for Social Research, mimeo 1984.

Table reads: Of all black women coming from parental homes in which no welfare income was received, 53 percent received no welfare income themselves after they had established independent households and 14 percent were heavily dependent on welfare after they established independent households.

Source of data: Panel Study of Income Dynamics

STATEMENT OF ERIC PALAZZO, PRESIDENT, NATIONAL COUNCIL OF COMMUNITY MENTAL HEALTH CENTERS

Senator WEICKER. The last witness in this particular group of NIH, ADAMHA, et cetera, is Eric Palazzo, the president of the National Council of Community Health Centers.

I want to apologize, my good friend Senator Proxmire is going to be taking over these hearings as I have to meet with Madeleine Will and the Assistant Attorney General.

We look forward to hearing you, Mr. Palazzo, and please proceed with your testimony at this time.

Mr. PALAZZO. Thank you, Senator Weicker, and Senator Proxmire.

I would like, first of all, to say that we would like to submit our full statement for the record and summarize the major points of this document.

The National Council of Community Mental Health Centers represents more than 600 community mental health programs comprising some 62,000 staff and board members nationwide. Community mental health programs throughout the country serve some 5 million people.

Mr. Chairman, the national council has joined with 26 other national organizations, many of whom have or will appear before this subcommittee during your public hearings, in support of a package of funding recommendations directed at services, research, and training programs under the Alcohol Drug Abuse, and Mental Health Administration.

We certainly support the coalition's fiscal year 1986 funding recommendation, and I would like to take a moment to highlight one of the coalition's recommendations dealing with alcohol, drug abuse, and mental health ADM block grant.

Prior to the implementation of the ADM block grant in 1981, alcohol, drug abuse, and mental health programs were categorically funded at $638 million. In fiscal year 1985, the current funding level is $490 million, a 23-percent reduction from fiscal year 1981. If inflation is taken into account, the actual reduction of funding for substance abuse and mental health services reaches over 35 percent in real dollars.

Although Federal support for these programs has diminished over the last few years, the demand for substance abuse and mental health services has increased. For just one example of this rising demand, we need to look no further than our Nation's cities where the well publicized growing number of mentally ill homeless populate our streets. This is but one indication of the crisis that is developing, one that surely will be devastating to our society without an infusion of greater resources.

The national council views the ADM block grant as the foundation of funding for comprehensive community mental health services which helps forge a partnership among Federal and State governments in community mental health centers.

The passage of the ADM Block Grant Amendments of 1984 and the increased authorization levels provided an opportunity, and indeed reiterated a congressional commitment to improving this funding foundation. The 1984 amendments also revised the funding formula for the distribution of ADM funds and established set-asides for seriously mentally disturbed childr, unserved or underserved population, and women suffering from substance abuse.

We fully supported, and continue to support, the change in funding formula because it better reflects the needs of each State. However, the amount appropriated by Congress last year did not come close to achieving adequate implementation of the funding formula.

We also think that the objectives of the set-aside were well-intentioned, but given the level of current funding, they have threatened the delivery of current services in many States. Unless the ADM block grant is fully funded at the $545 million level, this situation will be exacerbated and further weaken the service capacity of these States.

Senator, we fully recognize the difficult choice that the subcommittee will have to make regarding the fiscal year 1986 funding levels for programs under your committee's jurisdiction. There are so many programs that warrant the support of Congress. However, we strongly believe that our coalition recommendations are responsible and extremely well justified, and we respectfully urge the subcommittee's support.

Thank you very much for allowing us to participate in these hearings.

PREPARED STATEMENTS

Senator PROXMIRE [presiding]. Thank you very much, Mr. Palazzo. You argue that there was a 35-percent drop in funding for the Alcohol, Drug Abuse, and Mental Health Block Grant Program while there has been an increase in the need for services. I think that you make a very, very powerful case for community mental health funding. You presented a very fine statement. Thank you very much. We will insert your statement in the record at this point along with other statements submitted for the record on the Alcohol, Drug Abuse, and Mental Health Administration.

[The statements follow:]

STATEMENT OF ERIC PALAZZO

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM ERIC PALAZZO, PRESIDENT OF THE NATIONAL COUNCIL OF COMMUNITY MENTAL HEALTH CENTERS. I AM HERE TODAY TO PRESENT THE VIEWS OF THE NATIONAL COUNCIL WITH RESPECT TO FY 86 FUNDING OF ALCOHOL, DRUG ABUSE AND MENTAL HEALTH PROGRAMS UNDER THE JURISDICTION OF THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION.

MR. CHAIRMAN, WE APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY ON THE FY 86 LABOR-HEALTH AND HUMAN SERVICES APPROPRIATION BILL. THE NATIONAL COUNCIL COMMENDS YOU, MR. CHAIRMAN, FOR YOUR LONG-STANDING LEADERSHIP AND SUPPORT ON BEHALF OF HANDICAPPED AMERICANS.

THE NATIONAL COUNCIL OF COMMUNITY MENTAL HEALTH CENTERS REPRESENTS MORE THAN 600 COMMUNITY MENTAL HEALTH PROGRAMS COMPRISING SOME 62,000 STAFF AND BOARD MEMBERS NATIONWIDE. COMMUNITY MENTAL HEALTH PROGRAMS THROUGHOUT THE COUNTRY SERVE SOME FIVE MILLION PEOPLE. THESE PROGRAMS PROVIDE NEEDED MENTAL HEALTH, ALCOHOLISM AND DRUG ABUSE SERVICES TO PEOPLE OF ALL AGES AND DISABILITY GROUPS. COMMUNITY MENTAL HEALTH PROGRAMS ARE DESIGNED TO PROVIDE COMPREHENSIVE TREATMENT FOR THE MENTALLY ILL AT THE LOCAL LEVEL ENCOMPASSING SUCH SERVICES AS OUTPATIENT, INPATIENT, EMERGENCY, PARTIAL CARE, PSYCHOSOCIAL REHABILITATION, RESIDENTIAL AND CONSULTATION AND EDUCATION. THROUGH PROGRAMS SUCH AS THESE, A MAJORITY OF OUR NATION'S CITIZENS, INCLUDING THE CHRONICALLY MENTALLY ILL, CHILDREN AND ADOLESCENTS, AND ELDERLY, HAVE ACCESS TO COMPREHENSIVE MENTAL HEALTH SERVICES THAT WOULD NOT OTHERWISE BE AVAILABLE TO THEM IN A SETTING THAT OFFERS THE CLIENT AN OPPORTUNITY TO REMAIN IN THE COMMUNITY WITH FAMILY AND FRIENDS AT A LOWER COST THAN INSTITUTIONAL CARE.

REVENUES FOR COMMUNITY MENTAL HEALTH SERVICES FLOW FROM MANY SOURCES, INCLUDING THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH BLOCK GRANT, STATE GOVERNMENTS, LOCAL GOVERNMENTS, MEDICARE, MEDICAID, PRIVATE INSURORS, PATIENT FEES, AND PHILANTHROPIC CONTRIBUTIONS. ACCORDING TO A RECENT NATIONAL COUNCIL SURVEY OF

ITS MEMBERS, THE FOUR MAJOR SOURCES OF FUNDING FOR COMMUNITY MENTAL HEALTH CENTER ACTIVITIES ARE: 1) STATE GOVERNMENTS - 41.9%; 2) THIRD-PARTY PAYERS - 16.7%; 3) LOCAL GOVERNMENTS - 12.5%; AND 4) ALCOHOL, DRUG ABUSE AND MENTAL HEALTH BLOCK GRANT - 10.9%.

MR. CHAIRMAN, THE NATIONAL COUNCIL HAS JOINED WITH 26 OTHER NATIONAL ORGANIZATIONS, MANY OF WHOM HAVE OR WILL APPEAR BEFORE THIS SUBCOMMITTEE DURING YOUR PUBLIC HEARINGS IN SUPPORT OF A PACKAGE OF FUNDING RECOMMENDATIONS DIRECTED AT SERVICES AND RESEARCH AND TRAINING PROGRAMS UNDER THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION. THIS COALITION OF GROUPS IS DEEPLY CONCERNED WITH THE INADEQUACY OF THE ADMINISTRATION'S PROPOSED FY 86 BUDGET FOR THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION. HISTORICALLY, FUNDING FOR ALCOHOL, DRUG ABUSE AND MENTAL HEALTH PROGRAMS HAS BEEN WOEFULLY INADEQUATE AND THE ADMINISTRATION'S BUDGET WOULD BE ANOTHER BLOW TO INDIVIDUALS IN NEED OF MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES.

MR. CHAIRMAN, I WOULD LIKE TO SUBMIT FOR THE RECORD THE COALITION'S FY 86 FUNDING RECOMMENDATION AND TAKE A MOMENT TO HIGHLIGHT ONE OF THE COALITION'S RECOMMENDATIONS DEALING WITH THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH (ADM) BLOCK GRANT.

IN 1981, ALCOHOL, DRUG ABUSE AND MENTAL HEALTH CATEGORICAL PROGRAMS WERE CONSOLIDATED INTO THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH (ADM) BLOCK GRANT AS PART OF THE OMNIBUS RECONCILIATION ACT OF 1981 (PL 97-35). THE ADM BLOCK GRANT IS ESSENTIALLY TWO BLOCK GRANT PROGRAMS WITHIN ONE AUTHORITY, WITH DIFFERENT REQUIREMENTS AND PROVISIONS FOR SUBSTANCE ABUSE PROGRAMS AND COMMUNITY-BASED MENTAL HEALTH SERVICES. IN 1984, CONGRESS REAFFIRMED ITS COMMITMENT TO THOSE PERSONS SUFFERING FROM MENTAL ILLNESS AND SUBSTANCE ABUSE BY EXTENDING THE ADM BLOCK GRANT FOR AN ADDITIONAL THREE YEARS. THE AUTHORIZATION LEVELS FOR THE ADM BLOCK GRANT ARE: $515 MILLION IN FY 85, $545 MILLION IN FY 86 AND $576 MILLION IN FY 87.

PRIOR TO THE IMPLEMENTATION OF THE ADM BLOCK GRANT IN 1981, ALCOHOL, DRUG ABUSE AND MENTAL HEALTH PROGRAMS WERE CATEGORICALLY FUNDED AT A $638 MILLION LEVEL. IN FY 85, THE CURRENT FUNDING LEVEL IS $490 MILLION -- A 23% REDUCTION FROM FY 81. IF INFLATION IS TAKEN INTO ACCOUNT, THE ACTUAL REDUCTION OF FUNDING FOR SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES REACHES OVER 35% IN REAL DOLLARS. ALTHOUGH FEDERAL SUPPORT FOR THESE PROGRAMS HAS DIMINISHED OVER THE LAST FEW YEARS, THE DEMAND FOR SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES HAS INCREASED. FOR JUST ONE EXAMPLE OF THIS RISING DEMAND, WE NEED TO LOOK NO FURTHER THAN OUR NATION'S CITIES WHERE THE WELL-PUBLICIZED GROWING NUMBER OF MENTALLY ILL HOMELESS POPULATE THEIR STREETS. THIS IS BUT ONE INDICATION OF THE CRISIS THAT IS DEVELOPING -- ONE THAT SURELY WILL BE DEVASTATING TO OUR SOCIETY WITHOUT AN INFUSION OF GREATER RESOURCES.

THE NATIONAL COUNCIL VIEWS THE ADM BLOCK GRANT AS THE FOUNDATION OF FUNDING FOR COMPREHENSIVE COMMUNITY MENTAL HEALTH SERVICES WHICH HELPS FORGE A PARTNERSHIP AMONG FEDERAL AND STATE GOVERNMENTS AND COMMUNITY MENTAL HEALTH CENTERS. THE PASSAGE OF THE ADM BLOCK GRANT AMENDMENTS OF 1984 AND THE INCREASED AUTHORIZATION LEVELS PROVIDED AN OPPORTUNITY AND, INDEED, REITERATED A CONGRESSIONAL COMMITMENT TO IMPROVING THIS FUNDING FOUNDATION. THE 1984 AMENDMENTS ALSO REVISED THE FUNDING FORMULA FOR THE DISTRIBUTION OF ADM FUNDS, AND ESTABLISHED SET-ASIDES FOR SERIOUSLY MENTALLY DISTURBED CHILDREN, UNSERVED OR UNDERSERVED POPULATIONS AND WOMEN SUFFERING FROM SUBSTANCE ABUSE. WE FULLY SUPPORTED AND CONTINUE TO SUPPORT THE CHANGE IN THE FUNDING FORMULA BECAUSE IT BETTER REFLECTS THE "NEEDS" OF EACH STATE. HOWEVER, THE AMOUNT APPROPRIATED BY CONGRESS LAST YEAR DID NOT COME CLOSE TO ACHIEVING ADEQUATE IMPLEMENTATION OF THE FUNDING FORMULA. WE ALSO THINK THAT THE OBJECTIVES OF THE SET-ASIDES WERE WELL-INTENTIONED, BUT GIVEN THE LEVEL OF CURRENT FUNDING, THEY HAVE THREATENED THE DELIVERY OF CURRENT SERVICES IN MANY STATES. UNLESS THE ADM BLOCK GRANT IS FULLY FUNDED AT THE $545

MILLION LEVEL, THIS SITUATION WILL BE EXACERBATED AND FURTHER WEAKEN THE SERVICE CAPACITY OF THESE STATES.

MR. CHAIRMAN, WE FULLY RECOGNIZE THE DIFFICULT CHOICES THE SUBCOMMITTEE WILL HAVE TO MAKE REGARDING FY 86 FUNDING LEVELS FOR PROGRAMS UNDER YOUR COMMITTEE'S JURISDICTION. THERE ARE SO MANY PROGRAMS WHICH WARRANT THE SUPPORT OF CONGRESS. HOWEVER, WE STRONGLY BELIEVE THAT OUR COALITION'S RECOMMENDATIONS ARE RESPONSIBLE AND EXTREMELY WELL JUSTIFIED AND WE RESPECTFULLY URGE THE SUBCOMMITTEE'S SUPPORT.

THANK YOU FOR GIVING THE NATIONAL COUNCIL THIS OPPORTUNITY TO APPEAR BEFORE YOU TODAY. THAT CONCLUDES MY STATEMENT AND I WELCOME ANY QUESTIONS FROM THE COMMITTEE.

STATEMENT OF DR. MELVIN SABSHIN

I am Melvin Sabshin, M.D., Medical Director of the American Psychiatric Association, a medical specialty society representing over 30,000 psychiatrists nationwide. I am pleased to appear before the Subcommittee to address not only the particular concerns of the American Psychiatric Association regarding the President's proposed FY 1986 appropriations for the Alcohol, Drug Abuse, and Mental Health Administration, but also those of the American Association of Chairmen of Departments of Psychiatry, the American Association of Directors of Psychiatric Residency Training, and the American Society for Adolescent Psychiatry.

This statement for the record focuses on the Clinical Training programs of ADAMHA, the Alcohol, Drug Abuse, and Mental Health Block Grant; the NIMH Community Support Program; and ADAMHA Program Support functions.

NIMH CLINICAL TRAINING:

The Administration's FY 1986 budget again proposes elimination of federal support for the NIMH Clinical Training Program. As this Subcommittee knows, the same proposal was made for the past three fiscal years, and now, as then, directly contradicts your leadership and concern as to the need for continuing this program, regarded throughout the mental health field as the key to assuring improved availability and quality of professional care for all mentally ill Americans.

During the past four years, the APA and others have presented well-documented testimony underscoring the vital importance of continued Federal support for clinical training of mental health professionals. The APA has described findings from a wide array of careful studies which pointed unanimously to a present and projected future national shortage of psychiatrists, particularly those specially trained to treat mental disorders of children and elderly. Our testimony has emphasized the critical importance of Federal support in providing opportunities for disadvantaged and minority students to enter professional mental health careers. Attention has been called to the growing body of research demonstrating the cost-effectiveness of clinical training, including benefits (especially through consultation-liaison education) to medical students and primary care physician trainees in improving their ability to diagnose and treat the substantial numbers of the mentally ill seen exclusively in the general health sector. Central to our concern is a lack of other funding sources to meet the Congressional priority training areas.

In FY 1983-1985 the Congress showed prudence and sensitive understanding of the complex issues involved. Clear Congressional priorities were established for the NIMH clinical training activity in your FY 1983 bill and, in effect, a new program was mandated. In FY 1983 the Congress provided an initial appropriation of more than $20 million for support of this new initiative, and has continued the program at roughly the same level in subsequent appropriations bills. The creative and decisive action by Congress during this period is keenly appreciated. We want you to know that the National Institute of Mental Health has moved promptly, vigorously, and effectively to implement your priorities and mandate.

We have also brought to your attention the outstanding results in the State of Maryland of an NIMH-supported project linking academic psychiatric training centers to understaffed state service facilities. A follow-up evaluation found that one-third of all state hospital psychiatrists in Maryland were products of this program. As a consequence of your strong Committee Report language encouraging further development of this initiative, in FY 1985 the NIMH strengthened its priority for closer coordination between training centers and seriously understaffed public mental health service settings. We are very hopeful that the positive experience in Maryland can be duplicated in other states.

I noted last year our support for your Congressional mandate for equitable funding among the four core mental health professional disciplines. We continue to feel as you do that the flexibility to accommodate the legitimate differences in training activities should be preserved. In psychiatry, as the Committee knows, the most urgent need continues to be for funds to help offset institutional teaching costs. Such support enables physician faculty to concentrate more time in direct teaching and supervision of postgraduate house staff with respect to your stated priority subject matter areas.

Clinical training in the mental health professions requires three to five years at graduate and postgraduate levels to produce a qualified specialist; hence many of the grants awarded under the program will need continuation support in FY 1986. Based on widespread needs and a lack of funds from other sources for clinical training, it is anticipated that there will be a large number of high quality new and competing applications submitted for FY 1966 support. An increase in funding in FY 1986 over the 1985 level of $22 million would be both professionally and educationally sound. Accordingly, we respectfully recommend an NIMH Clinical Training appropriation of $26 million. This would allow continuation funding of projects initiated since FY 1983 as well as a modest number of new and competing awards of the highest priority.

Additionally, P.L. 98-509, the Alcohol, Drug Abuse and Mental Health Amendments of 1984, authorizes the Secretary of DHHS to make grants to support the training of health professionals in the identification and treatment of alcohol and drug abuse problems.

Before the alcohol and drug abuse clinical training programs were dismantled in 1982, (due to a lack of Federal funds previously made available for training activities), the training system consisted of grants to States, national training centers and career development and management internship programs. The Administration, in its request to eliminate the clinical training programs, expressed the belief that there already existed an adequate pool of alcohol and drug abuse program personnel. It was also expected that the States and the private sector would be able to assume funding for these training activities once Federal funds were withdrawn. This has not been the case, however, and many of the training progrms which took over a decade to develop and refine have been eliminated. It should be remembered that the alcohol and drug abuse fields also have more minorities, recovering people and non-degree staff than many of the traditional health fields.

In our judgement, the NIDA and NIAAA clinical training programs should receive at a minimum an appropriation of $1 million each.

ADM BLOCK GRANT:

The APA continues to have serious concerns as to the long-term level of federal funding for the substantial numbers of citizens served by the Alcohol, Drug Abuse, and Mental Health Block Grant. By the very nature of their handicaps, alcoholics, drug abusers, and the seriously mentally ill, are rarely able to represent their needs in the competition for available funds.

In 1981, alcohol, drug abuse and mental health categorical programs were consolidated into the Alcohol, Drug Abuse and Mental Health (ADM) Block Grant as part of the Omnibus Reconciliation Act of 1981 (PL 97-35). The ADM Block Grant is essentially two block grant programs within one authority, with different requirements and provisions for substance abuse programs and community-based mental health services. In 1984, Congress extended the ADM Block Grant for three years (FY'85 -FY'87) while revising the funding formula and specifically targeting a portion of the funds for new and expanded services for women suffering from substance abuse and mental health services for seriously disturbed children and unserved or underserved populations. The authorization levels for the ADM Block Grant are: $515 million in FY'85, $545 million in FY'86 and $576 million in FY'86.

Prior to the implementation of the ADM Block Grant in 1981, alcohol, drug abuse and mental health programs were funded at a $638 million level. In FY'85 the current funding level is $490 million -- a 23% reduction from FY'81. If inflation is taken into account, the actual reduction of funding for substance abuse and mental health services reaches over 35% in real dollars. Although federal support for these programs has diminished over the last few years, the demand for substance abuse and mental health services has not decreased. Moreover, it is well recognized that there is now a growing mentally ill homeless population which clearly indicates that the need for mental health and alcohol and drug abuse services has outgrown the financial base of support for these services.

The ADM Block Grant Amendments revised the funding formula for the distribution of ADM funds to a population/per capita income-based formula in order to better reflect the "needs" of each state with respect to these services. However, in moving to a population/per capita income formula, 25 states and the District of Columbia received no additional funds in FY'85. In addition, the new 10% set-aside for mental health services for seriously disturbed children and unserved or underserved populations and the 5% set-aside for women suffering from substance abuse will further erode existing services for all populations throughout the country and especially in the 25 "frozen" states and the District of Columbia unless FY'86 funding levels are substantially raised.

The ADM Block Grant is the foundation of funding for substance abuse and community mental health services, which helps forge a partnership among federal and state governments and community-level providers. The adoption of the proposed funding level of $545 million would signal a strong continuing federal commitment to those persons suffering from substance abuse and mental illness.

NIMH COMMUNITY SUPPORT PROGRAM:

In a related matter, Mr. Chairman, the President proposes again to abolish all Federal support for the NIMH Community Support Program (CSP), despite your continued restoration of funding. This national demonstration program, begun in 1977, has assisted states and communities in improving services for chronically mentally ill adults diverted or discharged from inpatient facilities. More than half of the chronically mentally ill -- many still substantially handicapped -- now reside in the community, without an appropriate network of medical and social servcies to meet even their minimal needs. During the first four years of the CSP Program, 19 state mental health agencies received modest NIMH funding and technical assistance for projects designed to assess the needs of this population. These projects work with state and local agencies to identify and fill service gaps, to reallocate existing resources, and to demonstrate and evaluate new local service delivery models of improved effectiveness and efficiency. In recent years additional new awards have been made directed at those most in need in our population.

The APA recommends that the demonstration grant authority be fully funded in FY 1986. These funds will be used to expand initiatives on problems of homeless mentally ill individuals and to initiate local demonstration projects to test models of providing services to this group; to plan and initiate demonstration projects on the more effective use and coordination of services for elderly persons who suffer from serious mental illnesses; to continue existing CSP initiatives for chronically mentally ill adults; to continue and expand the Children and Adolescent Service System Program (CASSP) for seriously emotionally disturbed children; and to continue to conduct important services systems research.

The CSP approach will prove particularly valuable in addressing the single most difficult mental health system problem of today -- the homelessness of many seriously mentally ill people who lack shelter, social and support services such as outreach, mental health screening, crisis housing, health services, case management, training, utilization of volunteers and encouragement of private sector initiatives.

An appropriation of $20 million would also expand funding for the adult and children and adolescent initiatives. The estimates of the number of children needing special services varies from 3 to 10 million, and the number receiving assistance is much lower than either estimate. The CASSP program was developed to respond to the special problem of linking children to the services that are available at the state and community level, as well as identifying the services that are needed and not available. There are still 24 states and millions of children that are not involved in CASSP.

Lastly, we recommend $5 million for a new program to assist the States in planning and coordinating the various social services, rehabilitation, health, education, and mental health services needed by the mentally ill. This effort is critical for providing the continuum of care for the chronically mentally ill as they move from an inpatient to outpatient treatment program and become productive and independent persons in the community.

NIMH-ADAMHA PROGRAM SUPPORT;

APA recommends the same number of full-time equivalent position (FTEs) for NIMH as appropriated for in FY'85 -- 969. House and Senate Committee Report language accompanying the FY'85 Labor-HHS-Education Appropriation Bill, restored 59 positions to the NIMH. The President's FY'86 budget rejects the Congressional restoration of 28 of these positions for Clinical Training, Demonstration, and Technical Assistance; makes further cuts of 30 in the

Intramural Research Program; and cuts research staff by 45 FTEs. Yet NIMH still has responsibility for the Demonstration, Technical Assistance, and Clinical Training Programs with specific and multiple congressional priorities.

APA recommends an FTE level for Fiscal Year 1986 of 269 for NIAAA. House and Senate Committee Report language accompanying the FY 1985 Labor-HHS-Education Appropriation bill restored 10 positions to NIAAA - 5 positions related to the support of Extramural Research, Training, Prevention and Research Dissemination Activities and 5 positions for the Intramural Research Activity. The OMB rejected the Appropriations Committees' restoration of the 10 FTEs in FY 1985 and the President's FY 1986 budget makes further cuts of 2 FTEs in the Intramural research staff and 8 FTEs in the Extramural programs. Our request for 269 FTEs for NIAAA would restore 20 FTE reductions proposed for both FY'85 and '86 and also add 49 new FTEs which will allow NIAAA to keep up with our proposed program growth.

The President's FY'86 budget request provides $10.7 million for direct operation and program management functions. We are requesting a FY'86 appropriation of $14.7 million. Our increase would provide funds to support the restoration of the 13 FTEs proposed for reduction and the 49 new FTEs associated with necessary program growth in FY'86 ($1.4 million); as well as restore postponed FY 1986 prevention and research dissemination program efforts ($1.6 million). As with the other Institutes, in Fiscal Year 1985 OMB directed the NIDA to reduce its total number of FTEs from 283 to 259, a reduction of 24 FTEs (6 FTEs from the Intramural Research Program and 18 from the Direct Operations Budget). An additional reduction of 6 FTEs from the Direct Operations Budget is proposed for Fiscal Year 1986. It is mistakenly believed by many that the NIDA Direct Operations Budget supports only the planning, coordination and general administrative services for the Institute's research and training program. However, within the Direct Operations budget are some of the most important program responsibilities of the Institute - prevention, technology transfer, technical assistance and research information dissemination -- activities of critical importance to the general public and the drug abuse field. The reductions in FTE levels seriously disrupt the Institute's ability to carry out its responsibilities in these critical areas.

We request the Congress to restore the total of 30 OMB-imposed FTE reductions. At the Fiscal Year 1985 appropriations level of 283 FTEs, the Institute will be able to continue to effectively carry out its important national responsibilities in the field of drug abuse.

We thank the Subcommittee for this opportunity to submit this additional statement for the record, and we look forward to working with you in conjunction with the FY 1986 Labor/HHS/Appro-priation Bill.

STATEMENT OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Mr. Chairman, thank you for providing the American Psychological Association (APA) with the opportunity to address our concerns about funding issues at the National Institutes of Health, the Department of Education, and the Office of Human Development Services.

National Institutes of Health (NIH)

We would like to begin by commending you, Mr. Chairman, for your successful efforts in restoring NIH new and competing research grant levels for FY 85, as well as increasing levels for FY 86 to a reasonable number well above the Administration's proposed 5,000 for each year. The attempts by the Administration to decrease the level of research grants in the behavioral and biomedical sciences is a violation of the intent expressed clearly by this Committee and Congress last year. We are grateful for your support in preventing this short-sighted strategy that would have severely disrupted the future of this nation's health research capacity.

We are very concerned about the $287 million cut proposed by the Administration in the FY 86 budget request of NIH. This proposal would decrease the NIH budget from $5.1 billion in FY 85 to $4.9 billion in FY 86. These figures represent a 5.6% decrease in total funding, and a 6.2% decrease in funding for research grants at NIH next year. These drastic custs in health research funding would be especially detrimental to the already small percentage of NIH funds that support behavioral and social science research. NIH support in FY 85 for these sciences has been estimated by NIH to be $137.7 million, a figure that accounts for less than 3 percent of the total NIH budget. With increasing evidence of the critical link between health promotion and disease prevention, this is a time when NIH's commitment to behavioral research should be strengthened, not weakened. We urge the Committee to substantially increase support for NIH research in the FY 86 budget in order to fund at least 6000 new and competing research grants.

NIH Research Training -- Research training at NIH would be funded at $218 million under the President's FY 86 budget, which is the same level of support as contained in the FY 85 budget. These funds, however, will support fewer trainees than in FY 85 because of a long overdue stipend increase. NIH support for research training is critical to the future of many scientific disciplines, including psychology. In particular, the behavioral sciences were proposed for increases by the most recent National Academy of Sciences report on our nation's personnel needs. We urge you to increase funding for NIH behavioral science research training at pre and post doctoral levels as recommended by the National Academy of Sciences.

Health and Behavior -- Many health problems, including heart disease and cancer, have been linked to behavior. Examples include: smoking; heavy drinking; lack of exercise; delay in seeking medical care; and failure to comply with prescribed treatment. Behavior is now a commonly recognized important component in successful health promotion and disease prevention, as reported in "Healthy People" by the Surgeon General, and "Health and Behavior" by the Institute of Medicine. Both recent reports document that 7 of the 10 leading causes of death are in large part behaviorally determined.

A special $7 million health and behavior initiative was developed by the Public Health Services in its FY 85 budget proposal, supported by this Committee in report language to accompany the FY 85 Appropriations bill, but was eliminated from the final FY 85 budget. Mr. Chairman, we are asking that the $7 million health and behavior initiative be reinstated in the FY 85 budget, and that NIH again be directed to significantly increase important research in health and behavior in FY 86.

National Institute on Aging (NIA)

The APA urges the Committee to support the NIA budget at the FY 1985 level of $144.5 million, plus an allowance for normal growth.

As the proportion of people in the United States age 65 and over continues to grow, from approximately 12 percent of the population currently (over 25 million individuals), to a projected 21.1 percent in 2020 (nearly 65 million individuals), the support for NIA funding for research in aging becomes increasingly important.

In the areas of social and behavioral sciences, NIA has supported research, primarily through grant awards, on the psychological and social aspects of aging. Research has shown that cognitive and intellectual functions in aging may decrease relatively little with advancing years. Behavioral research on health related activities of the aged and of health care providers has focused on such issues as the older person's compliance with prescribed regimens and treatment plans. Psychologists are also involved in the effort that NIA is undertaking in connection with Alzheimer's disease. This includes research into treatment, and prevention, and diagnostic capabilities.

National Institute of Child Health and Human Development (NICHD)

NICHD is the primary agency at NIH which supports behavioral and social science research. Research supported by NICHD over the years has furthered our understanding of both normal and abnormal development and has enabled us to prevent and treat developmental delays and disorders more effectively.

The Administration has proposed $293.1 million for the NICHD budget for FY 86, a reduction of $20.2 million (6.4%) from the FY 85 budget of $313.3 million. As stated by NICHD Acting Director Duane Alexander in recent Congressional testimony, the FY 86 funds will support new and ongoing initiatives in low birth weight prevention research, gene transfer technology to promote human growth and development, basic neurobiologic studies to understand and prevent mental retardation, development of improved vaccines for infectious diseases, population studies, and efforts to prevent childhood injuries. In order to carry out these and other proposed initiatives in adolescent pregnancy, single-parent families, and the adaptation of families with mentally retarded children, it is essential that more funds be appropriated to NICHD, not less. We recommend $347.2 million for NICHD for FY 86, an 11% increase over FY 85.

Education for All Handicapped Children Act (P.L. 94-142)

Under P.L. 94-142, all handicapped children are assured "a free, appropriate public education" which emphasizes special education and related services (including psychological services) to meet their unique needs. Programs under P.L. 94-142 currently serve over 350,000 seriously emotionally disturbed children and an additional 780,000 mentally retarded children. Yet many eligible children are not receiving services and the number of handicapped children in need of services is increasing by 40,000 a year.

The Administration has proposed funding the P.L. 94-142 state and local grant program at the FY 85 level of $1.135 billion. This proposed freeze would allow no cost of living increase to maintain current service levels, and would further reduce the Federal contribution to the national average per pupil expenditure (PPE). The current appropriation represents only 8 percent of the PPE, a drop from the consistent 12 percent Federal share in the 1970's and far below the 40 percent share envisioned when Congress enacted the program in 1975. Without adequate support, local school districts are reluctant to incur the higher costs of special education and related services and are showing an increasing tendency to delay provision of services until adolescence, when intervention becomes much more costly.

We recommend funding of $1.347 billion for the P.L. 94-142 state and local grant program for FY 86 to raise the Federal contribution to the program to 12 percent of the per pupil expenditure.

Office of Human Development Services (OHDS)

The Office of Human Development Services (OHDS) provides essential prevention, intervention, and support services for children, youth, and families, the elderly, the developmentally disabled and Native Americans.

OHDS also administers a coordinated discretionary funds program which supports research, demonstration, and training programs to address the needs of these special populations.

The Administration proposed level funding for all but a few OHDS programs for FY 86. However, as a means to respond to the growing stress faced by America's children, youth, and families, we urge Congress to increase the appropriation for the Child Abuse Prevention and Treatment Act to $41.5 million. We urge Congress to appropriate $10 million for the Child Abuse Prevention Federal Challenge Grants Act and $26 million for the Family Violence Prevention and Services Act. These two acts would provide for the establishment of innovative approaches to the prevention and treatment of family violence.

National Institute of Education (NIE)

We urge the Committee to increase funding at the National Institute of Education by 10 percent over the FY 85 level of $51.2 million to $56.3 million.

NIE was established in 1973 to promote educational research to improve the quality of teaching and learning in our schools. During its twelve-year life, NIE has seen its budget dwindle from $143 million in FY 1983 to $51.2 million in FY 1985. Although we recognize the many problems that NIE has had over the years, we feel that research supported by the institute is much too important to suffer because of internal problems generally unrelated to the substance of educational research. The activities supported by NIE, have contributed to real gains in our knowledge about how children learn, how teachers can be more effective, and how schools can become more effective environments for learning.

As an increasing proportion of NIE's funds are used to fund educational centers and laboratories around the country, very little has been left to support the individual investigators so important to maintaining the vitality of basic research. We recommend that Congress direct NIE to use all available funds over continuation costs for FY 86 to support individual investigators in educational research.

Acquired Immune Deficiency Syndrome (AIDS)

As the AIDS epidemic continues unabated, it has become clear that the need for psychological knowledge and interventions is expanding. We urge the Committee to allocate $5 million to NIMH for psychological research on AIDS. We also urge a top priority for prevention and community-based public education programs throughout HHS. New studies have shown a relationship between psychological distress and the working of the immune system. This research needs to be made directly relevant to AIDS, and used in clinical trials on AIDS patients. Other behavioral science research is needed to determine how best to help people change high-risk behavior related to AIDS. If 40,000 new people are likely to get AIDS in the next two years, as the Office of Technology Assessment has stated, the money spent now on prevention, public education and treatment research will help save millions of dollars and thousands of lives in the future.

Thank you again for the opportunity to participate in your deliberations. We would be pleased to answer any questions the Subcommittee may have and provide any further information on issues of particular to concern to the committee.

STATEMENT OF GRACE BAISINGER, CHAIRPERSON, THE NATIONAL CONSORTIUM FOR CHILD MENTAL HEALTH SERVICES

The National Consortium for Child Mental Health Services is a coalition of 18 national professional, consumer and provider organizations which meets regularly in Washington, D.C. to exchange information and ideas on public policy and programs serving the needs of children and adolescents. The Consortium seeks to improve mental health services to infants, children and adolescents through the joint advocacy efforts of its members, who represent a broad cross-section of national health, mental health, education, child welfare, and state mental health administrators' organizations. The Consortium also works with Congress and with federal agencies to promote sound public policy that meets the mental health needs of children and youth. We appreciate this opportunity to comment on FY 1986 appropriations for federal programs affecting child mental health.

Recent studies have suggested that at least three million of our nation's children are seriously behaviorally or emotionally disordered and in need of mental health services. Yet only a third of them are receiving services, and many of those are receiving care that is inappropriate or overly restrictive. This leaves and estimated two million children and adolescents who are not receiving the services they need. Infants, children, and youth today face many crisis situations, including:

- Child Abuse and Neglect -- 1.2 million children were reported abused or neglected in 1984, a 19% increase over the previous year. At least 4,000 children a year die at the hands of their own parents or close relatives, and for those who survive, emotional effects will remain long after the bruises have healed. Abuse may prompt children to run away from home and in turn fall prey to prostitution, pornography, and drug and alcohol abuse.

- Child Sexual Abuse -- Sexual abuse of children is reported up to 80,000 times a year, and the number of unreported incidents may be far greater due to children's reluctance to tell anyone. Without identification and termination of the abuse and the provision of professional help, the long-term emotional and psychological damage can be devastating.

- Teen Suicide -- More than 5,000 15- to 24-year-olds committed suicide in 1981, and the numbers are growing. Suicide is now the third leading cause of death for this age group.

- Childhood Depression -- An estimated 10% of the nation's children suffer some form of depression before age 12, and yet depression in children is still largely unrecognized and misunderstood.

- Teen Pregnancy -- Over one-half million babies were born to teen mothers in 1983, 10,000 of these to mothers age 14 or under. Many of these mothers received little or no prenatal care, placing their infants at high risk of low birthweight, birth defects, or death; teenagers deliver some 30 percent of all underweight babies.

- Poverty -- Of the 35.2 million Americans living in poverty, 13.3 million are children. One-third of them, 3.3 million children, have fallen into poverty just since 1979.

The long-term cost of later institutionalization, lost productivity, and federal support payments for these individuals far exceeds the cost of early intervention programs in childhood. For example, Dr. T. Berry Brazelton has stated that it costs $50,000 to treat a child admitted to the hospital because of "failure to thrive," a delay in child development which can be prevented through early intervention services. Moreover, Stanley Greenspan has estimated that it costs at least $400,000 to treat and educate a child with serious emotional problems and support him throughout his lifetime. Dr. Greenspan adds, "even if the preventive early interven-tion program costs $5,000 in the most expensive case, it is enormously cost-effective in the long haul to make sure the child starts out competent." Given the importance of early intervention for children with emotional disabilities, the Consortium would like to make the following recommendations for funding cost-effective prevention and intervention programs and support services which meet the mental health needs of children.

Department of Health and Human Services
Public Health Service

Alcohol, Drug Abuse, and Mental Health (ADM) Block Grant

THE CONSORTIUM RECOMMENDS APPROPRIATIONS OF $545 MILLION IN FY 1986 FOR THE ADM BLOCK GRANT, WHICH IS THE FOUNDATION OF FUNDING FOR LOW-COST COMMUNITY MENTAL HEALTH SERVICES FOR CHILDREN AND THEIR FAMILIES.

During last year's reauthorization of the ADM Block Grant, Congress addressed the needs of underserved populations by specifically targeting funds for new and expanded services to priority groups, including a 10 percent set-aside that may be used for seriously emotionally disturbed children and adolescents. However, prior to implementation of the ADM Block Grant in 1981, alcohol, drug abuse, and mental health programs were categorically funded at a level of $638 million. In FY 1985, the current funding level is $490 million -- a 23 percent reduction from FY 1981. If inflation is taken into account, the actual reduction of funding reaches over 35 percent in real dollars. ADM Block Grant funds must be increased in order to address the unmet needs of seriously emotionally disturbed children without reducing services to other populations. Adoption of the full FY 1986 authorization level of $545 million would signal a strong continuing federal commitment to those persons suffering from mental illness, including seriously emotionally disturbed children and youth, and would help prevent the need for more expensive hospitalization in later life.

Community Support Program (CSP), Child and Adolescent Service System Program (CASSP), Mental Health Services Demonstration

THE CONSORTIUM RECOMMENDS THAT THE COMMITTEE APPROPRIATE THE FULL AUTHORIZATION LEVEL OF $20 MILLION FOR DEMONSTRATION PROGRAMS UNDER NIMH AND ALLOCATE AT LEAST $6.2 MILLION OF THIS FOR CASSP (THE CHILD AND ADOLESCENT SERVICE SYSTEM PROGRAM).

The NIMH Community Support Program (CSP), targeted first toward the special problems of serving chronically mentally ill adults in the community, was expanded two years ago to include an initiative aimed at severely disturbed children and adolescents. Last year, the Alcohol, Drug Abuse, and Mental Health (ADM) Block Grant Amendments (P.L. 98-509) established an authority for a broader range of services, research and demonstration projects modeled after CSP and targeted to high priority populations, including severely disturbed children and adolescents.

The children's initiative (CASSP) was developed to respond to the special problem of linking children to the services that are available at the state and community level and linking the service systems together so that children do not fall between the cracks, as well as identifying the services that are needed and not available. In FY 1984, Congress earmarked $1.5 million under CSP to fund this children's initiative. The response to the initial NIMH program announcement for CASSP was overwhelming: forty-four states and territories submitted applications to compete for the $1.5 million. However, NIMH was able to fund only 12 states and anticipates funding only 10 more states during 1985. The CASSP funds, though small compared to total state and federal mental health dollars, have a significance beyond their amount in stimulating youth-serving agencies to work together, effectively and cooperatively, in many cases for the first time. There is a continuing need for the majority of states to improve services for severely emotionally disturbed children and adolescents.

We urge Congress to appropriate the full $20 million for demonstration programs in FY 1986 and earmark at least $6.2 million of this for CASSP. This level would allow for sufficient funds to be allocated to continue the 22 CASSP projects initiated by FY 1984 and FY 1985 and fund an additional 8-10 projects in FY 1986, as well as target remaining demonstration funds to other priority populations such as the chronically mentally ill, the elderly, and homeless persons.

Research and Research Training

THE CONSORTIUM RECOMMENDS $276.9 MILLION IN FY 1986 FOR NIMH RESEARCH AND RESEARCH TRAINING PROGRAMS TO IMPROVE, PREVENT, AND TREAT MENTAL ILLNESS, REHABILITATE AFFECTED INDIVIDUALS, AND PROMOTE MENTAL HEALTH.

According to a recent study by the Institute of Medicine, mental illness and substance abuse affect some 30 to 45 million people and cost $20 billion each year in direct health care expenditures. Costs are particularly high for severely disturbed children, who could be affected by mental illness throughout their lifetime. The IOM study points out that substantial breakthroughs in understanding and treating major mental disorders are likely in the foreseeable future. Given the extremely high promise in the field of mental health research and the potential for health care cost savings resulting from such research, particularly for children, it is time for a major expansion of the NIMH research capacity.

Clinical Training

THE CONSORTIUM RECOMMENDS THAT THE NIMH CLINICAL TRAINING PROGRAM BE FUNDED AT $26 MILLION IN FY 1986, WHICH WOULD ASSURE CONTINUATION SUPPORT AND MODEST NEW GROWTH.

While the Administration proposes termination of this program, clinical training remains an important component for training professional mental health clinicians of all disciplines and providing specialty training in particular skills. Given the shortage of mental health services for children and other underserved groups, it is essential to provide mental health clinicians with the necessary skills to effectively treat these populations, such as children, with their unique needs.

National Institute of Child Health and Human Development (NICHD)

THE CONSORTIUM RECOMMENDS $347.2 MILLION FOR NICHD FOR FY 1986, AN 11% INCREASE OVER THE FY 1985 LEVEL.

The National Institute of Child Health and Human Development (NICHD), part of the National Institutes of Health, is charged with ensuring through research the birth of healthy and wanted babies, and the opportunity for each infant to reach adulthood unimpaired by physical or mental handicap and to achieve his or her full potential. Research supported by NICHD over the years has furthered our understanding of both normal and abnormal development which, in turn, has enabled us to prevent developmental delays and disorders and treat developmental problems more effectively. Of particular interest to the Consortium is the NICHD Center for Research for Mothers and Children, which includes the Human Learning and Behavior Branch and the Mental Retardation and Developmental Disabilities Branch. Both of these Branches support research to examine the critical interactions among biological, psychological, social, and environmental factors which determine the course of human development.

The Administration's proposal of $293.1 million for NICHD in FY 1986 represents a $20.2 million reduction, or 6.4%, from the FY 1985 budget of $313.3 million. As stated by NICHD Acting Director Duane Alexander in testimony recently presented before the Senate Labor-Health and Human Services-Education Appropriations Subcommittee, the FY 1985 funds will support new and ongoing initiatives in Low Birth Weight Prevention Research, gene transfer technology to promote human growth and development, basic neurobiologic studies to understand and prevent mental retardation, development to improve vaccines for infectious diseases, population studies, and efforts to prevent childhood injuries. In order to carry out these and other proposed initiatives in such areas as adolescent pregnancy, single-parent families, and the adaptation of families of mentally retarded children, it is essential that more funds be appropriated to NICHD, not less. Because of the impact of such research on child mental health, the Consortium recommends $347.2 million for NICHD in FY 1986, an 11% increase over FY 1985, to ensure the continuation of the current research funding level.

Maternal and Child Health Block Grant

THE CONSORTIUM RECOMMENDS THAT THE COMMITTEE APPROPRIATE $510 MILLION FOR THE MATERNAL AND CHILD HEALTH BLOCK GRANT AND SUPPORT EFFORTS TO RAISE THE AUTHORIZATION CEILING THIS YEAR.

This grant to states, designed to provide health care to mothers, infants, children, and adolescents in poverty or otherwise at risk, reaches only a fraction of those who need services. The health services provided have a strong preventive thrust, and a number of studies have found them to be highly successful in reducing infant mortality, mental retardation, and other developmentally disabling conditions. The Administration's proposal to freeze funding at current levels would in fact mean a 7% cut in services, given the rate of medical inflation. The Consortium recommends increased funding to maintain current service levels and prevent more costly long-term health problems, and urges Committee members to oppose the Administration's suggested folding-in of Community Health Centers, Immunizations, Migrant Health Centers and Family Planning Programs, which would mean further service reductions.

Medicaid

While recognizing that a specific appropriation is not made for Medicaid, the Consortium would like to call the Committee's attention to the impact of Medicaid services on the mental health of children. The Medicaid budget, designed to assure adequate health care to all of our nation's poor children, has in the past reached less than half of poor children (in some states even fewer) due to various state-dictated eligibility requirements. Thus, in the past four years, while childhood poverty was increasing, the number of children receiving Medicaid benefits was declining. Recognizing that children who are sick, unhealthy, or clinically ill are subjected to stress which stunts their emotional as well as physical development, we ask Committee members to oppose efforts to cap Medicaid, which would in effect cut back services to children even further. We also ask you to support funding for the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program and the Child Health Assurance Program (CHAP), two Medicaid-funded programs which assure access to health care for poor children and are often their only point of contact with health and mental health providers.

Office of Human Development Services

Programs under the HHS Office of Human Development Services provide important prevention, early intervention, and support services to help children and families in crisis and are important in meeting the mental health needs of children.

Title XX Social Services Block Grant

THE CONSORTIUM RECOMMENDS THAT THE COMMITTEE SUPPORT INCREASED APPROPRIATIONS OF $3.3 BILLION FOR TITLE XX IN FY 1986, WITH THE EXPECTATION THAT CONGRESS WILL RAISE THE AUTHORIZATION CEILING FOR THE BLOCK GRANT THIS YEAR.

Title XX is the primary source of public financing of social services in the States and provides a number of support services to children, including day care, protective services, and residential care. In light of the growing demand for day care services and reports of increasing incidence and severity of child abuse, particularly child sexual abuse, social service agencies need help in meeting the expanding demand for their services. The Consortium also opposes efforts to fold in funding for the Community Services Block Grant, which would mean a 14 percent decrease in funds available for social services.

Child Welfare Services, Foster Care, and Adoption Assistance

THE CONSORTIUM RECOMMENDS THAT TITLE IV-B CHILD WELFARE SERVICES UNDER P.L. 96-272 BE FUNDED AT $250 MILLION IN FY 1986.

This would allow a cost-of-living increase to maintain current services while providing additional funds to respond to increasing service needs. In 1984, reports of child abuse and neglect increased by 19%, and the Child Welfare League of America reports that the severity of problems of children entering the child welfare system has escalated over the past year. The Consortium supports the Administration's proposal to maintain the Title IV-E Adoption Assistance program as an entitlement, and recommends that Title IV-E Foster Care also continue as an entitlement rather than being capped as the Administration has proposed. States are reporting more severe, multi-problem cases and must be given the flexibility to increase foster care services for these children as needed.

Headstart

THE CONSORTIUM RECOMMENDS FUNDING HEADSTART AT $1.221 BILLION IN FY 1986, THE FULLY AUTHORIZED LEVEL.

Headstart has a proven track record and has been widely recognized as a cost-effective, successful program for assuring that poor children receive child development, health and support services in their earliest years. As a result, Headstart children are displaying lasting gains in school achievement and have been shown less likely to require special education services. They also receive more medical and dental screening and immunization services, and the Children's Defense Fund estimates that total benefits outweigh costs by 235 percent, taking into account lifetime earnings. The program gives special attention to handicapped children, requiring that at least 10% of children served by Headstart be handicapped. Last year Headstart served over 440,000 children, 12.5% of whom were handicapped; but the program reaches only 18 percent of those who are eligible, and another 2 million eligible children remain unserved. The Administration's proposal to freeze funding at FY 1985 levels would reduce services further and eliminate an estimated 19,000 from the program. Given the successful record of the program and the numbers of children still unserved, the Consortium recommends increasing funding to the fully authorized $1.221 billion in FY 1986.

Child Abuse and Neglect Prevention and Treatment

THE CONSORTIUM RECOMMENDS FUNDING CHILD ABUSE AND NEGLECT PREVENTION AND TREATMENT GRANTS AT THE FULL FY 1986 AUTHORIZATION LEVEL OF $41.5 MILLION.

Federal funding has supported a wide range of activities, including grants to states for developing, strengthening, and implementing child abuse and neglect prevention and treatment programs, professional training, conferences to encourage a multi-agency approach, and an information clearinghouse. The 1984 reauthorization legislation added a focus on prevention, restored a distinct emphasis on child sexual abuse prevention, and increased authorization levels to respond to the increases in child abuse. Many states are facing reduced aid while receiving increased reports of abuse and are having to decide services on the basis of severity of the reported abuse or the age of the child. In some states neglected children are given little or no attention; other states are considering redefining types of abuse such that children of school age would not be considered endangered. Despite such problems, the Administration has proposed freezing the state grant program at current levels and cutting research and demonstration funds by $4 million. Given what we know about the consequences of abuse and neglect, the federal government should be directing more attention to preventing child abuse, not less.

Children's Trust Fund

THE CONSORTIUM RECOMMENDS A SUPPLEMENTAL APPROPRIATION OF $10 MILLION FOR THE CHILDREN'S TRUST FUND FOR FY 1985, AND $10 MILLION IN APPROPRIATIONS FOR FY 1986.

Last fall Congress passed legislation establishing a four-year Federal matching grant program to encourage States to develop trust funds for child abuse prevention activities, but no funds have yet been appropriated. The fully-authorized funding level is needed to assist State efforts to combat child abuse in the face of depressed State economies and budget cutbacks.

Family Violence Prevention

THE CONSORTIUM RECOMMENDS A SUPPLEMENTAL APPROPRIATION OF $11 MILLION FOR FY 1985 AND THE FULLY AUTHORIZED AMOUNT OF $26 MILLION FOR FY 1986.

In 1984 Congress passed new legislation estabishing a federal program of grants to states to provide shelter and related services to the victims of family violence, following the recommendations of the Attorney General's Task Force on Family Violence report issued last fall. Both Congress and the Task Force recognized the need for specific federal assistance to respond to the multidimensional aspects of family violence. It is a problem affecting families from all social and economic backgrounds, and existing shelters report that an increasing number of their residents are children. A supplemental appropriation is needed to provide start-up funds for the program, which has received no appropriations as yet.

Runaway and Homeless Youth Program

THE CONSORTIUM RECOMMENDS $50 MILLION FOR THE RUNAWAY AND HOMELESS YOUTH PROGRAM IN FY 1986.

The Runaway and Homeless Youth Program provides shelter care and counseling services to runaway and homeless youth and their families ouside of the traditional law enforcement system. With FY 1984 funds, the program supported 265 centers which provided shelter care to 70,200 youth, one-time drop-in counseling to 221,400 youth, and telephone "hot-line" services to 260,000 youth, along with research and demonstration projects to reunite families, provide outreach and after-care services, and provide counseling services to respond to such growing problems as child abuse and teenage suicide.

According to a study conducted by the U.S. General Accounting Office, the Runaway and Homeless Youth Program only meets the needs of about 5-10% of the nation's one million runaway and homeless youth at the present time. Despite a growing awareness of the urgent needs of this population, however, the Administration proposes retaining the FY 1985 funding level of $23.25 million in FY 1986. In order to develop services in underserved areas and continue existing programs for these troubled youth and their families, the Consortium joins with other coalitions of professional and youth service organizations in recommending $50 million for this vital program in FY 1985.

Department of Education

The Consortium is committed to advocacy for a full range of mental health services available to all children as their needs require. Under P.L. 94-142, the Education for All Handicapped Children Act, children with special needs are assured of mental health services as a related service. The Consortium appreciates the support Congress has given to the programs within P.L. 94-142 in the past and requests continued support as an increasing number of handicapped children move into the education system.

Currently programs under P.L. 94-142 serve over 350,000 emotionally disturbed children, and an additional 780,000 who are mentally retarded. Yet we have known for years that the number of emotionally disturbed children and adolescents being reached under P.L. 94-142 is only a small portion of those whose illnesses detract from their education. Despite a drop in overall school enrollment, the number of handicapped children needing services is increasing by 40,000 a year. The Consortium recommends the following appropriations for programs under P.L. 94-142:

P.L. 94-142 State and Local Grant Program

THE CONSORTIUM RECOMMENDS APPROPRIATIONS OF $1.347 BILLION FOR STATE AND LOCAL GRANTS WHICH ASSIST SCHOOLS IN MEETING THE EXTRA COST OF SPECIAL EDUCATION SERVICES FOR HANDICAPPED CHILDREN.

The FY 1985 appropriations of $1.135 billion represented only 8 percent of the national average per pupil expenditure (PPE), a drop from the consistent 12 percent federal share in the 1970's and far below the 40 percent share envisioned when Congress originally enacted the program. The Administration's proposal to freeze this program at FY 1985 levels would allow no cost of living increase to maintain current service levels, further reducing the federal contribution to 7 percent of the PPE. Without adequate support, local school districts are reluctant to incur the higher costs of special education services and are showing an increasing trend toward delaying provision of services until adolescence, when intervention becomes more costly. Funding of

$1.347 billion would at least reinstate the federal contribution to the minimum acceptable level of 12% of the PPE.

P.L. 94-142 Preschool Incentive Grants

THE CONSORTIUM RECOMMENDS AN APPROPRIATION OF $36.48 MILLION FOR PRESCHOOL INCENTIVE GRANTS, REPRESENTING 50 PERCENT OF THE FULL AUTHORIZATION, TO ENCOURAGE STATES AND COMMUNITIES TO DEVELOP EARLY INTERVENTION PROGRAMS.

In 1984, Congress extended this grant program from ages 3-5, to ages 0-5, but appropriated only an extra $3 million over the previous year's $26 million funding. The appropriate inclusion of this new age group, added to the more than 240,000 children already in the system, reduces the program to 40 percent of its fully authorized amount. The Consortium recommends increasing the funding to expand services to preschool children needing early intervention.

P.L. 94-142 Early Childhood Education Program

THE CONSORTIUM RECOMMENDS THAT THE EARLY CHILDHOOD EDUCATION PROGRAM BE FUNDED AT ITS FULL AUTHORIZATION OF $28.3 MILLION IN FY 1986.

This program complements the Preschool Incentive Grants by supporting research, demonstration, and outreach projects, early childhood state plans, and technical assistance activities. The demonstration projects have been judged so successful that Congress expanded the program in 1984, with 30 percent of the appropriations directed at assisting states to plan, develop, and implement comprehensive special education and related services to handicapped children from birth through age 5. The President's proposal to freeze the program at the FY 1985 level of $22.5 million will not provide adequate support for states to build services for their unique needs, and the Consortium recommends increasing funding to the fully authorized amount.

P.L. 94-142 Secondary and Postsecondary Education Programs

THE CONSORTIUM RECOMMENDS FUNDING THE SECONDARY EDUCATION AND TRANSITION SERVICES PROGRAM AT $6.66 MILLION IN FY 1986, AND APPROPRIATIONS OF $5.5 MILLION FOR THE POSTSECONDARY EDUCATION PROGRAM, WHICH PROVIDE TRANSITION SERVICES FOR SPECIAL EDUCATION ADOLESCENTS MOVING INTO ADULTHOOD.

Since 1978, the percentage of disabled students entering college has doubled, with an even higher percentage moving into programs for independent living and vocational training. The modest appropriations currently supporting the Secondary and Postsecondary Education programs under P.L. 94-142 will reap tremendous long-term cost-savings as these higher percentages of handicapped students move into competitive employment, independent living, and independent adulthood.

P.L. 94-142 Special Education Personnel Development

THE CONSORTIUM RECOMMENDS THAT SPECIAL EDUCATION PERSONNEL DEVELOPMENT PROGRAMS BE FUNDED AT THE FULL AUTHORIZATION LEVEL OF $64.37 MILLION IN FY 1986 TO GIVE SPECIAL ATTENTION TO INCREASING TRAINED PERSONNEL.

Handicapped children need and deserve a large number and variety of trained personnel to guide them during their education. The Consortium supports the provision of mental health "related services" under P.L. 94-142 by qualified physicians, psychologists, social workers, and other mental health specialists under conditions that meet quality control standards. Funds under the Special Education Personnel Development program provide needed support to institutions of higher education as well as to parent training and information centers. At a time when Congress has guaranteed a 10 percent set-aside for parent training programs and the number of handicapped children being served is increasing yearly, the President's proposal to reduce funding for this program by $11 million in FY 1986 represents a step backward. Such reductions will not result in real cost-savings, but only cause handicapped children and adolescents to remain dependent because of a lack of qualified providers to help them.

Members of the National Consortium for Child Mental Health Services:

American Academy of Child Psychiatry
American Academy of Pediatrics
American Association of Children's Residential Centers
American Association of Psychiatric Services for Children
American Medical Association
American Orthopsychiatric Association
American Psychiatric Association
American Psychological Association
American Society for Adolescent Psychiatry
Child Welfare League of America
Children's Defense Fund
National Association of School Psychologists
National Association of State Mental Health Program Directors
National Center for Clinical Infant Programs
National Congress of Parents and Teachers
National Council of Community Mental Health Centers
National Mental Health Association
Society of Professors of Child Psychiatry

STATEMENT OF DR. R.A. DEITRICH, PROFESSOR OF PHARMACOLOGY AND SCIENTIFIC DIRECTOR, ALCOHOL RESEARCH CENTER, UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

I would like to thank the Committee on Appropriations for the opportunity to present testimony concerning the research program and funding of the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

It is appropriate to take a few minutes to review the history of alcohol research and its accomplishments to date, in order to better understand the opportunities for the future.

As you are aware, the effort of the Federal government in alcohol research is relatively recent. There was, however, a small research effort before that time. As has been pointed out by Dr. Dora Goldstein of Stanford University, we tend to forget that many of the significant advances in the treatment of alcoholism were made possible by research findings, especially if they were made many years ago. For example, it used to be relatively common that alcoholics would die with rum fits or delerium tremens. Research showed that this did not usually occur during drinking, but only upon cessation of drinking and was a result of withdrawal from alcohol. At that time, it was not certain that alcohol was addicting in the usual sense. Knowledge of alcohol withdrawal led to vastly improved treatment and the saving of many lives. These advances were a direct result of research; clinical observations during the hundreds of years before had not supplied the answer.

Subsequently, a multi-hospital study identified that the minor tranquilizers (benzodiazepines) as the best drugs for treatment of withdrawal; whereas, the major tranquilizers, commonly used in the treatment of psychoses, actually made things worse.

Similarily, people died, not from the direct effects of alcohol, but from the low blood sugar, as a consequence of excessive consumption. From research findings it was understood that alcohol can lower blood glucose in malnourished individuals, but raise it in well-fed individuals.

Research has also provided the understanding that a very destructive syndrome associated with alcoholism, Wernicke's disease, which eventually causes permanent brain damage, was primarily a vitamin deficiency. The routine administration of Vitamin B_1 has greatly reduced if not eliminated this problem.

The discovery from animal and human experimentation, that alcohol damages the liver, even in well-nourished individuals, is changing the thinking of a generation of physicians.

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The inappropriate use of fluid replacement in alcoholics is now thought to cause severe or fatal brain damage (central pontine myelinolysis). The correctness of this idea was shown by reproducing the condition in animals.

More recently the discovery of a genetic component in familial risk for human alcoholism, and the development of animal models for many actions of alcohol has pushed the field into the mainstream of biological research.

The establishment of NIAAA has spurred an increase in alcohol research, and certainly the Federal effort has increased from essentially nothing only a few years ago, to a first-rate productive and visable research effort both in the intramural and extramural programs. However, the effort in proportion to the problem is badly out of balance. In 1980, the first Institute of Medicine Report on alcohol research clearly documented, that based upon dollars per $1,000 of cost to the Nation, research dollars per death, or dollars per chronic case, alcohol research ranks far behind research on cancer or heart disease. For example, in 1978, the amount spent on research was $209 per case for cancer, but only $1 per case for alcoholism. The Institute of Medicine concluded at that time that "alcohol research is not funded at a level commensurate with the economic cost it imposes on society or at a level comparable to research funding for other major disorders". Again, in 1982 and in 1984, this view was reiterated by this prestigious group. Their recommendation for NIAAA is a research budget of $100 million in constant 1983 dollars.

Thus, the request by the Administration of only $52.8 million for alcohol research is woefully inadequate. Even the amount of $68 million would not meet the goal, but would allow NIAAA to meet its present committments and provide at least some growth.

As it stands in FY 1985, it has been necessary for NIAAA to cut the currently funded R01 and Center grants. In our Alcohol Research Center, this 10% cut has severely restricted a number of important projects. For example, we have a project to assess the genetic influence on the reaction of individuals to alcohol. This is an important study with regard to the basis of the genetic component in human alcoholism and, as a spin-off, it carries far-reaching consequences for solutions to drunk-driving problems. However, we have never been able to fully fund that project, and this year, we have again been unable to proceed at the maximal pace possible. The Alcohol Research Centers have been funded at the fully authorized level only once during the eight years that we have had our Center at the University of Colorado. In research institutions where a critical mass of high quality investigators are present, I believe that the Centers provide more research per dollar amount spent than can be achieved by any other mechanism. Funding cuts, directed at all NIAAA R01 and Center grants this year, seriously disrupt ongoing projects and inhibit the flow of new scientists into the system. These cuts are penny-wise but pound-foolish.

I fully realize that the necessity of reducing the Federal budget deficit is upper-most in our minds as American citizens. However, even a small dent in the over $100 billion per year cost of alcoholism to our government and Nation would repay, many times over, the proportionately small amount of cost for alcohol research in the budget needed to accomplish this change.

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EDITORIAL

Alcohol Research Comes of Age

Richard A. Deitrich, PhD

THE Research Society on Alcoholism recently met with the International Society for Biomedical Research on Alcoholism. At this meeting there were over 340 submitted papers and symposia ranging from "Recent Advances in Psycho-Social Research" to "Molecular Genetics." Participants came from 25 different countries. The title of this editorial resulted from the diversity, number, and quality of presentations at the meeting. There was an excitement and enthusiasm that, for many years, was shared by only a small group of researchers. Gratifying as the response to the meeting was, we have a long way to go. Such a research effort must be supported by research funds from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), by increased support from private groups as well as by government agencies in foreign countries. It is like trying to build a fire in pouring rain. Preparation requires very careful gathering of a critical mass of the right raw materials, dry shavings, tinder, etc. The striking of the match might be analogous to the establishment of NIAAA several years ago when the first few tentative flickerings and smolderings became apparent. More than once an errant drop of rain in the form of a short-sighted congressional appropriation or administrative indifference has threatened to put it out, but now I believe that we are at the stage of an honest-to-goodness flame. The flame is still very vulnerable and in need of more fuel in the form of excellence in research and much huffing and puffing by government and private funding agencies, but it is a flame nonetheless. In such a situation, when the dividing line between a fire and a black smoldering mess is very thin, one often wishes that they had remembered to bring the charcoal starter. The use of such a volatile fluid does wonders and the process becomes autocatalytic. The heat of the fire dries the new wood which then catches fire and joins in. What we are now looking for is that catalyst, the fuel that will make the flickering research that we now have, a real bonfire of significant proportions in the research world. In this meeing, I saw the fuel in the form of excellent scientists ready to explode into such a warming and rewarding fire of research advances that will ultimately "dry out" the alcoholics and alcohol abusers and let their lives burn more brightly, rather than letting them remain wet and continue to stand in the rain and prematurely rot away.

Obviously, all researchers have a vested interest in this process, the efforts of all of us as well as those in the funding agencies are necessary to achieve these goals. However, there are many buckets of water that can be spilled on our fire. We are constantly plagued by poor or sloppy research, premature announcements of startling results, and promises that we cannot keep. One thing that we can do to counteract these problems is to resolve differences in research findings between our laboratories. It must be very confusing to the public to see divergent statements from scientists. I do not believe that it is acceptable to righteously insist on the correctness of our own findings in the face of contradictory evidence from other reputable scientists. Every researcher knows that when the results fit the hypothesis, the results are published; but if the results do not fit the hypothesis then the experiment is repeated again and again until either we have to change the hypothesis or find the artifact in the first experiments. I am suggesting that results from another laboratory that do not agree with our own should receive no less consideration than if we had obtained those results ourselves.

Much more dangerous is the problem in science that has received much public notoriety recently: the reporting of out-and-out fraudulent research results. Scientists in research involving a chronic, eventually fatal, human disease have a special obligation to guard against such tactics. Theoretical physicists who fake data or make premature and incorrect announcements will certainly harm their career, but they will have made no promises to the afflicted of a miracle cure.

This problem of fraudulent research data or even the accusation of such tactics destroys public confidence. All researchers are vulnerable. Example after example can be found of a trusted research associate gone wrong even among the most respected laboratories. While we can insist that it is a rare occurrence, the notoriety that the fraud attracts does not leave that impression in the mind of the public; and in the final analysis, it is the public that we must convince. Increased funding gained by excellent research, by lobbying Congress, and by appeals to private donors can disappear in an instant when a big "splash" is made over some incident involving false or fraudulent claims.

The alcohol research effort is clearly deserving of, and is achieving, stature and respectability in the research world, but the hold is tenuous and requires the best effort of all involved.

From the Department of Pharmacology, University of Colorado Health Science Center, Denver, CO.

Presented at the annual meeting of the Research Society on Alcoholism in response to the presentation of the Society's Fifth Award for Scientific Excellence to Richard A. Deitrich in June 1984.

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STATEMENT OF ORVILLE H. MCELFRESH, PRESIDENT, NATIONAL ASSOCIATION OF ALCOHOLISM TREATMENT PROGRAMS, INC.

The National Association of Alcoholism Treatment Programs (NAATP) appreciates this opportunity to address the Labor, Health & Human Services and Education Appropriations Subcommittee on FY 1986 appropriations for the National Institute on Alcohol Abuse and Alcoholism (NIAAA). NAATP is the only national health care organization devoted solely to issues in alcoholism treatment. NAATP represents more than 400 private-sector treatment programs throughout the country, both non-profit and for-profit, offering inpatient, residential and outpatient regimens in both hosptial-based and free-standing settings.

For more than a decade, NIAAA has been the focal point within the federal government for advancement of alcoholism treatment, prevention and research. Since its inception in 1971, the Institute has played a vital role for the alcoholism field, as well as for society as a whole. Many of the seminal inroads we have made in dealing with alcoholism have been the direct result of findings made possible through NIAAA-funded research.

Alcoholism is estimated by the Institute to be the third leading cause of death and disability in the United States, trailing only heart disease and cancer in its magnitude. For several years, now, the Institute has also estimated that 85% of citizens in need of treatment for their alcoholism never seek or receive that treatment. Untreated alcoholism--its ravaging effects devastating nearly every organ and system in the body--is, indeed, today's "American Tragedy." Perhaps the greatest tragedy is that through modern techniques, constantly being researched and refined through efforts supported by NIAAA, alcoholism is a disease which is eminently responsive to appropriate treatment. Yet the stigma which surrounds this disease prevents many in need of help from seeking that help, and many family members and friends from encouraging it.

For many years, alcoholism treatment has been offered mainly on an inpatient basis in a hospital setting. One of the reasons this particular modality has prevailed is that most private insurance coverage for alcoholism treatment has covered only hospital-based settings. Since the inception of the Alcohol, Drug Abuse and Mental Health Block Grant, there has been a dramatic shift in the majority funding for alcoholism treatment from public sources to private ones. Additionally, and, to some degree, in response to this phenomenon, the alcoholism treartment field has developed what it calls the "levels of care" concept. This concept, which attempts to match the severity of each individual patient's disability with an appropriate intensity of service or level of care, needs to be recognized, researched and refined. NIAAA is in the best position to fund the kind of research needed, and, indeed, NAATP believes that such research should become a prime priority of the Institute.

LEVELS OF CARE IN ALCOHOLISM TREATMENT

Just as there are several types of cancer and heart disease, there are, as well, many types or degrees of alcoholism. The variables, in diagnosis, can relate to gender, age, drinking history, family impact and history, employment (history and type), previous treatment experience, overall physical condition, motivation to recover, etc. To deal with the different levels of alcoholism, the alcoholism treatment field has developed three basic modalities, or levels, of care: inpatient, residential and outpatient.

The inpatient level of care is usually best for the severely sick, long-drinking alcoholic, who generally presents for treatment with concomitant medical and psychiatric complications, and who needs absolute separation from the trappings of everyday life. The residential level of care is an intermediate one, less medically-intensive and, thus, appropriate for patients not experiencing psychiatric or advanced medical problems, but who still need the benefit of a therapeutic milieu. Outpatient programming is considered appropriate when the alcoholic is in the earliest stages of the disease, and whose dysfunction has not become entirely unmanageable.

HOW TREATMENT COST IMPACTS TREATMENT CHOICE

One of the greatest issues confronting the public today is the problem of ever-increasing health care costs. The era of health care cost containment is upon us; we in the alcoholism treatment field welcome it because we firmly believe that appropriate alcoholism treatment stands as its own cost containing measure. This is, in fact, undeniable in comparison to the never-ending costs of treating the myriad consequences of untreated alcoholism.

The March, 1983 report of the Office of Technology Assessment, The Effectiveness and Costs of Alcoholism Treatment (Health Technology Case Study #22), eloquently concluded that "...it costs more not to treat alcoholism than to treat it." However, this landmark report underscored the fact that the notable lack of methodologically sound treatment assessment research in alcoholism leaves many questions unanswered. The basic question, in the absence of reliable research data, still remains: What type of treatment is appropriate for which type of alcoholic?

The answer to this question must be more than merely a function of cost. With the aforementioned stigma accorded alcoholism and its victims, we must guard against implementation of a public policy which simply states that alcoholics deserve only the least intensive--thus the least expensive--level of care. Certainly, this was the philosophy which prevailed thirty to forty years ago, when alcoholics were deemed incurable, and relegated to asylums offering little more than custodial care.

The alcoholism treatment field, itself, has responded to the recognition of different types of alcoholism with the "levels of care" concept. The field has been continually refining its diagnostic techniques, in order to determine the most appropriate levels of care for alcoholic patients. While insurance coverage--albeit to varying degrees--is available largely to inpatient, hospital-based programs, it is scanty, indeed, for residential and outpatient treatment. This is, certainly, a contradiction in terms with regard to cost containment.

As a result, the Office of Technology Assessment called for the creation of a "patient placement system," to match alcoholic patients to the appropriate levels of care based on the severity of their disease upon diagnosis and admission. NAATP has whole-heartedly supported this idea since it was advanced by OTA, but, to date, NIAAA has not moved forward on the OTA's suggestion. NAATP believes at least $500,000 should be set aside by the Institute in FY 1986, specifically to generate high quality and appropriate grant and contract proposals on patient placement and to fund the best research proposals.

GREATER EMPHASIS NEEDED ON TREATMENT-RELATED RESEARCH

Many historic and welcome advances have been made in the alcoholism field as a direct result of NIAAA-funded research. There is little doubt that the lion's share of FY 1986 appropriations for NIAAA reserach will go toward biomedical reserach, to help us all better understand the effects of alcohol on the body, the very etiology of alcoholism, the interaction of alcohol with other drugs, etc.

While NAATP is highly supportive of the need for biomedical research, we also believe that greater attention should be paid to treatment assessment research. While many NAATP member programs regularly review and assess their treatment and its outcome, it is important that a respected, non-vested entity, namely the NIAAA, become more involved in this vital area of research.

Such an effort, begun in earnest by NIAAA, could answer so many of the questions raised by the OTA report, by the Health Care Financing Administration, by private insurors and employers and even by the alcoholism treatment field itself.

The information we seek relates to average length-of-stay, appropriate treatment regimens, development of common definitions of recovery, success/failure rates--and why. Without the answers, how can we determine an appropriate public policy on alcoholism treatment?

CONCLUSIONS AND RECOMMENDATIONS

The National Association of Alcoholism Treatment Programs respectfully recommends the following to the Subcommittee:

1. That $500,000 be set aside in FY 1986 NIAAA appropriations for patient placement research and assistance to the field in creation of quality grant and contract proposals on such research.

2. That the Institute be allowed a level of funding which would permit greater emphasis on treatment assessment research, in general.

3. That the Institute widely publicize the availability of additional treatment assessment funds, should they be appropriated, to the alcoholism treatment field, ensuring its ability to participate in any such efforts, in an advisory, competitive or other appropriate fashion.

4. That, upon completion of treatment research efforts, the Institute disseminate data, results and analyses to the treatment field as soon as practicable.

5. That the Subcommittee appropriate $545 million for funding of the FY 1986 Alcohol, Drug Abuse and Mental Health Services Block Grant.

NAATP wishes to express its support for NIAAA's many contributions to the alcoholism treatment field, both present and potential. There is a need for greater emphasis on treatment assessment and related research at the Institute which, in the current climate, surely approaches the importance of the Institute's biomedical research.

This concludes the formal statement of the National Association of Alcoholism Treatment Programs. We appreciate the opportunity to express our views, and respectfully request that this testimony appear in the offical record of this hearing.

Thank you.

STATEMENT OF TING-KAI LI, M.D., PROFESSOR, INDIANA UNIVERSITY SCHOOL OF MEDICINE, AND PRESIDENT-ELECT, RESEARCH SOCIETY ON ALCOHOLISM

I am Ting-Kai Li, Professor of Medicine and Biochemistry at the Indiana University School of Medicine. I am also President-Elect of the Research Society on Alcoholism, which has an active national membership of more than 500 doctorate level researchers. Our common interest is the development of knowledge applicable to the detection, prevention and treatment of alcohol abuse and alcoholism. It is the only professional society in the field of alcohol-related research. I am pleased to appear before this Subcommittee to present the concerns of its membership regarding the President's proposed FY 1986 budget for the National Institute on Alcohol Abuse and Alcoholism (NIAAA). I am also a private citizen member of the National Advisory Council on Alcohol Abuse and Alcoholism.

Mr. Chairman, I known that you and members of this Subcommittee are well-aware of the extent, seriousness and multi-billion dollar economic cost of the health and social consequences of alcohol abuse and alcoholism. In spite of the magnitude of the problem for the nation, the allocation of federal research dollars for research into the etiology, prevention and treatment of these disorders, which comes principally through NIAAA, is minuscule.

The current NIAAA research budget is only 1.1% of the total appropriated for NIH and ADAMHA. That for Cancer is 23% and that for Heart, Lung and Blood, 16%. The research dollars for dental problems exceed that for alcoholism by almost 100%. As pointed out in a 1980 study by the Institute of Medicine of the National Academy of Sciences, entitled "Alcoholism, Alcohol Abuse, and Related Problems" and by yet another recent IOM report entitled "Research on Mental Illness and Addictive Disorders", many research opportunities exist, and the magnitude of the problem demands that research activities and funding be increased urgently. Both reports recommended that funding for alcohol-related research should be increased to 100 million constant 1980 dollars.

The problem with alcoholism-related research in the past has been the lack of a biological "handle". However, research in the last decade and supported by NIAAA funding, especially that within the past 4-5 years, has produced a radical shift in the conception of alcoholism held by the scientific research community, by clinicians interested in treating alcohol problems, and by segments of the concerned public, e.g., the recently established Children of Alcoholics Foundation.

Among the major research advances that have produced this change are:

1) The discovery of genetic predisposition to problem drinking and alcoholism in at least 40% of afflicted individuals.
2) The discovery that genetic predisposition and environmental factors can interact to affect severity of the disorder in a subgroup of the genetically predisposed individuals. The results indicate that both genetic makeup and the evironment are important variables in the design of successful treatment and prevention strategies.
3) The demonstration that as a group, children of alcoholics differ from children of nonalcoholics in neurophysiological and neuropsychological testing, both with and without a test dose of alcohol. These and other differences are being investigated as potential "markers" of individuals more at risk in developing alcoholism than others.
4) The finding that there is tremendous between-individual differences of genetic and biological origin, both in humans and experimental animals, with regard to responses to alcohol, e.g., the amount of alcohol necessary to produce impairment of function, the ability to develop tolerance and physical dependence, and the rate of metabolism of alcohol. Understanding of the biological basis of these differences are important to the development of effective treatment and prevention strategies for alcohol-problems and alcohol dependence, even for those not at genetic risk.
5) The discovery that genetic differences in the enzymes of alcohol metabolism can affect drinking behavior and hence, the development of alcoholism. For example, the genetic absence of one of the forms of aldehyde dehydrogenase has now been shown to be a negative risk factor for the development of alcoholism.

6) The development of animal models to study the genetic and biological mechanisms of alcohol intoxication, tolerance, and dependence.

7) The development of an animal model of alcoholism itself through genetic selection for unusually intense alcohol-seeking behavior. In fact, these animals exhibit an abnormally lowered level of the neurotransmitter serotonin in certain brain regions. Studies have shown that drugs which raise the level of this neurotransmitter in brain attenuates the alcohol-seeking behavior of these animals. These findings suggest that these drugs may be useful in the treatment of alcoholism in humans, which is a disorder characterized by aberrant alcohol-seeking behavior.

8) The finding that alcoholics are more susceptible to the interaction of alcohol with vitamin B-1 (thiamin) and with the enzymes dependent upon this vitamin in producing chronic brain damage. It can be hypothesized that thiamin therapy in alcoholics can produce a decrease in alcohol-induced brain damage.

Because of advances such as these, the view of alcoholism as a symptom of psychological conflict or as character or personality dysfunction has yielded to experimentally approachable formulations of interactions between inherited biochemical and physiological factors and exposure to alcohol, family environment and sociocultural influences.

At the clinical level, studies on children of alcoholics, a biologically predisposed, high-risk group, has become a high priority research goal. The aims are to find out if biochemical and/or physiological tests can specifically identify the individuals at high risk. Such studies have tremendous importance and relevance to the development of future treatment and expansion. The concern has proven to be unfounded. For many years, NIAAA had funded a substantially lower percentage of approved applications than that funded by NIH, NIMH and NIDA. This is still the case. In FY 1982, NIAAA funded 36% of the approved grants and the 90% payline was a priority score of 198. For FY 1984, it funded 33% of all approved applications, and the 90% payline was a score of 178. In FY 1985, the 90% payline will be even lower, 175, if the same number of grants (92) as FY 1984 are funded. Therefore, an increase in high-quality grants has kept pace with increased funding. Unfortunately, because of the decreased growth rate in FY 1985, funding in this FY is insufficient to meet the commitments built up the previous two years. As result, the regular (R01) continuation grants are being paid this year at 92-95% of Council-approved levels, and the new and competing grants and the research center grants are being paid at only 90% of the approved levels. In addition, no new RCDA's are being funded and research contracts (mostly mandated by Congress) are being reduced by 50%.

The President's Request for NIAAA in FY 1986 contains an even smaller increase ($52.6 million total) for alcohol research. This increased amount still will not meet current commitments. With this amount, there will again be 8-10% cuts imposed on all the investigator-initiated and center grants, and only 92 (or less than 30%) of the approved new and competing grants would receive funding.

If it is the intent of Congress that high quality research on alcoholism and related problems should continue to grow, an increase beyond the President's request is needed. To meet current services commitments and to allow for modest growth, NIAAA should be receiving $68-69 million in FY 1986 for re-prevention strategies. At the laboratory level, studies using genetically developed animal models, e.g., alcohol-preferring and alcohol-sensitive and -resistant lines of rats and mice, are becoming more prevalent. These will explore the biochemical and physiological basis of aberrant alcohol-seeking behavior and of intoxication, tolerance, and physical dependence. Such studies will provide not only understanding of the biology of alcoholism but also rational approaches to finding therapeutic compounds.

There are many other, exciting, recent advances. For example, the enzymes of alcohol metabolism in human liver have now been purified and characterized. The genes for these enzymes have been cloned and sequenced, and current research is directed at identifying how these genes are regulated and whether genetic polymorphism of these enzymes can serve as markers of predisposition to alcoholism. All of these advances promise rapid gains in our understanding of the biology of alcoholism in the near future, and a sustained increase in research funding is needed. Otherwise, the recently developed momentum and excitement in the field will dissipate.

In partial response to the recommendations of the Institute of Medicine Report of 1980 that research funding for alcoholism and related problems should be increased 50% in each of the next three years to a constant 1980 dollar level of $100 million, the NIAAA research budget was increased from $23.3 million in FY 1982 to $43 million in FY 1984. As result, the number of new and competing awards increased from 40 to 92. Last year's appropriations for NIAAA was, however, only $49 million. This slower rate of growth last year in part reflected the concerns of this Subcommittee that there would not be enough high-quality applications to meet continued search. This amount would include an increase of $5 million in operational costs and FTE's for the small but high quality intramural research program at NIAAA. Additional FTE's are needed to support the work of the newly recruited Research Director and the excellent research staff of the Laboratory of Clinical Studies.

Another area of grave concern is support of research training. This is the life-blood of the future. Support for research training has been inadequate for years. Because costs have risen, the number of trainees have steadily declined. NIAAA currently supports less than 70 trainees and the amount devoted to training in FY 1985 is only 3.7% of the total for extramural research. A recent analysis indicates that a 4-fold increase is needed for the future. Research training through NIAAA should be at least $3 million in FY 1986. Six to eight percent is what NIH, ADAMHA and HRSA devote to research training. Cutting back on training support is false economy, because long-lasting ill-effects become apparent only years later.

I respectfully request that this Subcommittee consider offering an amendment to the proposed NIAAA component of the ADAMHA budget for FY 1986 to include an additional $16 million for research and another $1.5 million for research training. Program support dollars and FTE's, which has not grown commensurately with the research portfolio since 1982, also should be increased by 50%. These increases are urgently needed for the continued growth that Congress and the Administration deemed necessary three years ago. The research field has responded to the challenge to fight alcoholism and alcohol problems through research and the momentum should not be allowed to dissipate.

STATEMENT OF THE FEDERATION OF BEHAVIORAL, PSYCHOLOGICAL AND COGNITIVE SCIENCES

Mr. Chairman, thank you for the opportunity to provide a statement in addition to our earlier testimony on the National Institutes of Health. The Federation is a coalition of 13 scientific societies with combined memberships of over 90,000 scientists. The Federation's interests include research on behavioral, psychological and cognitive processes and their physiological bases, including health, education and human development.

Before I begin, I must say we deplore the Administration's directive to reduce the number of awards to 5000 at the National Institutes of Health and to 500 at the Alcohol, Drug Abuse, and Mental Health Administration for FY85--a clear violation of Congressional intent. It is important to the nation that a strong Federal role in health and mental health research be maintained. Mr. Chairman, we applaud your efforts to restore award levels.

This testimony will discuss research and funding at the National Institute of Education and the Alcohol, Drug Abuse, and Mental Health Administration.

National Institute of Education

It is crucial to our nation's future that we provide excellent education for our young people, but providing this excellence is proving increasingly difficult with traditional instruction. Research on education is now accepted as a necessity.

Studies of beginning reading have produced a clearer picture of how children learn letter patterns and associated sounds. Research is being used to improve reading comprehension through changes in textbooks and teaching guides. Teaching effectiveness research is influencing classroom management throughout the nation. Effective school research has identified the basic characteristics of successful schools, particularly at the elementary level. The National Institute of Education (NIE) has been a pioneer in supporting critical research in cognitive science.

Research in cognitive science is not only changing our views of how people learn science and mathematics but is also shaping a theory of learning in which content plays a central role. Much of the research provides significant findings of importance to educational practice. Recent information about the sources of difficulty in learning and understanding of mathematical, scientific and technical concepts provides a basis for educational materials and methods that can reach a broader group of students.

In recent history, the NIE has had barely enough funding to support its prior commitments to the regional laboratories and centers. It has had essentially no resources to support the independent researcher with a novel idea or the innovative collaboration of researchers from different disciplines. While excellent work is being done at NIE laboratories and centers, the lack of uncommitted resources means no ability to respond to fresh new ideas from unforeseen sources. It also limits the ability to support and encourage interdisciplinary research (e.g., between cognitive psychologists, educators and subject-matter experts). Finally, it limits the pool of researcher talent that NIE can tap.

As with any science, research results cannot be bought in a short time frame. Neglecting basic research this year means fewer results in five or ten years. We will not be able to remedy this deficit by increasing research spending at that later time. Good research requires attracting good people to work on important problems, training new researchers, and obtaining results to basic questions and working out their applications. None of this can be done quickly; so results for the future must be funded now, not left to the future. If we do not support such work now, we will find ourselves in the future without new ideas or methods, surpassed by other nations with foresight.

The community of educational researchers is large and active. For example, NIE received 110 and 33 requests for planning grants for the center and laboratory competitions respectively. Only 36 and 21 planning grants were available and only 11 and 8 centers and laboratories, respectively, will be funded during this competition. It is also important to note that many proposals were prepared by consortia.

The open competition of the laboratories and centers is vital to educational research. The laboratory competition is on schedule. Although we appreciate that Secretary Bennett has called on a distinguished group of researchers to advise him on research directions for the department, this has resulted in a recently ordered two-month delay in the center competition. We not only hope but indeed would expect that the center competition would then continue without further delay.

NIE FY86 Appropriations

The Administration's request of $51.2 million for FY86 is not commensurate with the need for research in education or with the ability of the educational research community and is still far below the FY81 funding level of $65.6 million. NIE's purchasing power has been decreasing as its funding levels have remained around $50 million (53.4, 55.6, 48.2 and 51.2 million for fiscal years 1982 through 1985, respectively). We urge that NIE receive in FY86 a minimum of $56.3 million--a 10% increase over the FY85 appropriation.

Alcohol, Drug Abuse, and Mental Health Administration

The Institute of Medicine, in a recent report Research on Mental Illness and Addictive Disorders, estimates that mental disorders, alcoholism and drug addictions profoundly affect 30 to 45 million people in the United States each year. Another dramatic measure of the effect is the number of lives that are touched by those suffering from mental disorders and addictions. The National Institute of Alcoholism and Alcohol Abuse (NIAAA) estimates that 30 to 40 million people are affected because a close family member is either alcoholic or has been killed or injured by an individual under the influence of alcohol. These illnesses place a great strain on our nation. The Institute of Medicine estimates that the overall monetary impact of mental disorders and substance abuse is $185 billion per year.

Research efforts within the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) are and should continue to be directed beyond the understanding and treatment of specific mental disorders and addictions. We must understand the normal to understand the abnormal. The details of normal development are needed to prevent or treat childhood disorders. The National Institute of Mental Health (NIMH) goal is to promote mental health and must remain so. Studies of affective distortions of depressed individuals are meaningful only if we know more about emotional development in general. The perceptual anomalies of schizophrenics do not make much sense unless we fully understand the process of underlying perception. Memory problems of Alzheimer's patients must be analyzed in the context of learning and memory capacities of normal older individuals.

Behavioral sciences are a central part of mental health research. There is a growing need to understand the etiology of mental illness through shared behavioral and biological information. The range of research includes attentional mechanism and defects, correlates of personality competence, self-regulatory mechanisms, family processes, stress, and prosocial and aggressive behaviors. Let me give several specific examples.

Recent behavioral research on morphine addiction in animals has shown that the animals become conditioned to the place where they receive morphine. Relapse is more likely when the addiction and detoxification situations are different and the subject returns to the addiction situation after detoxitication. Withdrawal symptoms can be elicited without the animal receiving any morphine by exposing the animal to the situation where morphine was previously received . This may explain why street drug addicts who are detoxified in a prison or hospital relapse when they return to the street.

Experiments on the effect of alcohol and other drugs on developing fetuses has provided convincing evidence that behavioral symptoms, such as fetal alcohol syndrome, are due to effects of the drug rather than genetic or environmental causes. Research with animals who were prenatally exposed to sex hormones indicates that these animals have a different, less appropriate repertoire of behaviors later in development. Because of these types of results, reater caution is now suggested for pregnant women.

About 2 million children require immediate care due to severe mental disorders. An estimated 8 to 20 million have less urgent but real needs. The major mental health problems in childhood include developmental disorders, hyperkinetic behavioral and attention disorders,and psychotic disorders. Techniques have been developed to help in the early diagnosis of emotional and attachment disturbances. Research is working to delineate the role of early experience in inhibiting or fostering later development of behavioral disorders.

ADAMHA FY86 APPROPRIATION

The present is marked by expanding scientific opportunities and at the same time decreasing support of research. The Administration has proposed decreasing NIMH research support to $190.2 million for FY86 from $196.2 million in FY85. This reduction jeopardizes the health of research on mental health. We urge this Subcommittee to increase NIMH research support to $252.8 million in FY86.

The small increases proposed for research funding at the National Institute on Drug Abuse (NIDA) and NIAAA in the Administration's budget are inadequate. We urge Congress to increase funding of NIDA from $64.6 in FY85 to $79.6 million in FY86 and to increase funding of NIAAA from $49 million in FY85 to $68.7 million in FY86.

Research training support at NIMH has declined dramatically in the last decade. The number of trainees has dropped from 1352 in FY80 to about 878 this year. The Administration's budget proposes a freeze on research training support. In 1983 the Institute of Medicine's Committee on Personnel Needs for Biomedical and Behavioral Research advocated increased Federal support for behavioral science research training. We urge this Subcommittee to increase research training support at NIMH to $24.1 million, at NIDA to $1.6 million and at NIAAA to $2.7 million.

Conclusions

We share with you a strong concern for consistency of funding for research by the Federal government. It is important to the training of future generations of scientists, to the treatment and prevention of illness, to the improvement of the health of the people of this nation, to address mental health problems and to teach our children. We are grateful for the continued support of this Subcommittee, and we urge that the:

- NIE FY86 appropriation be at least 10% above the FY85 level, in recognition of the importance of educational research to the education of our children,
- NIE broaden its research portfolio to include individual extramural research grants,
- NIMH research funding for FY86 be increased to $252.8 million,
- NIDA research funding for FY86 be increased to $79.6 million,
- NIAAA research funding for FY86 be increased to $68.7 million and
- research training support be increased at NIMH to $24.1 million.

The Federation thanks the Subcommittee for the opportunity to share our views with you. Please do not hesitate to call on the Federation staff if we can be of further assistance.

STATEMENT OF CHARLES M. WEST, P.D., EXECUTIVE VICE PRESIDENT, THE NATIONAL ASSOCIATION OF RETAIL DRUGGISTS

Senator PROXMIRE. Our next witness is Dr. Charles West. Dr. West is executive vice president of the National Association of Retail Druggists. Dr. West, we are pleased to have you with us.

Dr. WEST. Thank you, Senator.

Our organization represents the owners of the independent pharmacies in the United States.

Senator PROXMIRE. Where are you from?

Dr. WEST. I am from Little Rock, AR.

Senator PROXMIRE. You sound like you might come from Arkansas.

Dr. WEST. As owners of independent pharmacies, our members are committed to legislative and regulatory initiatives designed to provide them a fair chance to compete. We appreciate the opportunity to appear before the subcommittee today and present our recommendations for the Department of Health and Human Services, Health Care Financing Administration programs, especially Medicare.

Competition in retail pharmacies is alive and well. Competition is an incentive for efficiency and price competition in retail pharmacy is greater than can be found among the other providers of health services.

There are many problems confronting independent retail pharmacists who serve Medicare patients. Until recently, when HCFA implemented major policy changes designed at eliminating the discounts earned by pharmacists who are more efficient and exercise sound business decisions, the basic inequity of the fixed fee far over shadowed other problems associated with the Medicaid Pharmacy Program.

Under the present Federal regulations covering Medicaid reimbursement for pharmacies, the State Medicaid agencies may not pay more for prescribed drugs than the lower of ingredient cost plus a reasonable dispensing fee or the provider usual and customary charge to the general public.

The ingredient payment for a prescription drug is defined as the lower of the maximum allowable cost, MAC, as established by the HHS Pharmaceutical Reimbursement Board for certain multiple source drugs, or the estimated acquisition cost [EAC] of the drug.

The MAC provision, which was designed to take advantage of the price differential between brand name drugs and lower priced generic equivalent limits ingredient reimbursement to the less expensive generic equivalent. Thus there are four major components to be considered in establishing the maximum drug reimbursement level: One, the MAC level for multiple-source drugs; two, the EAC level for all drugs; three, the dispensing fee for providers; and four, the usual and customary changes of providers.

The Federal Government establishes the first component, the individual State Medicaid agencies are responsible for establishing the next two components, and the pharmacy providers in the marketplace determine the last component.

Specifically, the regulations state that EAC means the State Medicaid agency's best estimate of what price providers generally are paying for a drug. The regulations further state that the basis for the estimate must be the package size providers buy most frequently.

Since the outset, HCFA has guaranteed the States considerable latitude in the design and administration of the Medicaid Drug Program, particularly in the development and use of their EAC limits. Currently, State Medicaid agencies utilize various methodologies in determining EAC. The most commonly used method is based on published average wholesale price, AWP.

In a major policy reversal, HCFA has dictated that reliance on AWP is unacceptable and will result in extreme sanctions. This major change in policy is blatantly antismall business. It ignores the fact that such discounts are based on the entire business relationship of the pharmacists and not solely on the Medicaid portion of the business.

Many times, the total net profit is directly reflected in the ability of pharmacists to obtain discounts. As recently as last fall, we were guardedly optimistic that HHS and HCFA would finally address the failure of the Medicaid Drugs Program's various components to provide adequate remittance for overhead return on investment, operating costs, and profit as required by title XIX of the Social Security Act and relevant regulations.

There was a hearing in June 1983, the hearing was called by Secretary Heckler, to address the entire program, and today I can report to you that it appears to us that this was just a sham, and not a bona fide effort. As it is often said, the real proof is in the pudding and the fact is that in late April HCFA told States in region 6 that they are in noncompliance for permitting retailers to receive their earned discounts, and if the discounts are not eliminated by July 1, 1985, Medicaid payments to the States will be substantially reduced.

The law has not been amended, and there is no change in the regulations have been proposed. The only change is a major reversal in HCFA policy. If the proponents of such selective changes in policy have never heard of free enterprise, or perhaps they envision a country with only nonprofit agencies.

The new EAC policy changes are untimely, unfair, and unwarranted. By eliminating the incentive of discounts, thenew policy encourages less efficiency in the delivery of prescription drugs, and jeopardizes the Medicaid Drug Program.

We seriously question whether Congress intended that Medicaid be implemented in such an antifree enterprise manner. We request the subcommittee to include language in its report that prohibits HCFA from implementing the new policy. At a minimum, we expect that such a basic alteration of longstanding Federal policy be proposed for public review and comment in the Federal Register. The Administrative Procedure Act requires no less.

We seek the support of the subcommittee for our recommendation, and we will assist the members and staff in the refinement of our proposal.

Senator, I appreciate very much this opportunity.

Senator PROXMIRE. I have great sympathy with your problem. I have had an opportunity to talk to pharmacists in Wisconsin, and you reflect their views very well.

The problem is that Medicaid patients are not spending their own money. Therefore, competition among druggists, it seems to me, is not really affected. If you are a Medicaid patient and if one drug store charges three times more than another for a drug that you used, what incentive do you have to worry about cost when as a Medicaid patient you don't pay for the drug.

Dr. WEST. There is a provision in the regulations that takes advantage of competition.

Senator PROXMIRE. What provision takes advantage of competition?

Dr. WEST. The lower offer provision. The pharmacist has a product that he sells because of competition, in the Medicaid Program there is the cost of the drug, the pharmacist has to go and purchase the drug from the wholesaler, and he incurs that cost. Then there is a maximum fee allowed by the Medicaid Program, and it varies from State to State but $4 would be the maximum fee allowed, or something less than that, $3.25 to $3.50 is an average.

The pharmacist has two components, the cost plus the fee. That is the maximum that Medicaid will pay, the cost of the drug plus a fee, the fee that that particular State has established.

The competitive situation is, the lower offer provision, if the pharmacist, because of competition, sells a product for a very low price, or made it its cost, Medicaid will not pay more than that price.

Senator PROXMIRE. Let me just say that the Appropriations Committee does have particular power with respect to appropriating funds. But this is a decision, it seems to me, that would be made by the authorizing committee. I suggest that you also let that committee know your sentiments. Perhaps you have already testified before them.

Dr. WEST. No; but we will.

Senator PROXMIRE. Thank you very much.

Dr. WEST. Thank you.

STATEMENT OF JACK W. OWEN, EXECUTIVE VICE PRESIDENT, AMERICAN HOSPITAL ASSOCIATION

Senator PROXMIRE. The next witness is Jack Owen, executive vice president of the American Hospital Association.

Mr. OWEN. Thank you very much, Senator.

I am Jack Owen, executive vice president of the American Hospital Association, which represents about 6,100 hospitals across the country, and about 38,000 personal members. I appreciate this opportunity to present our views on the administration's fiscal year 1986 appropriation request for health professions education, the National Service Corps, and Prospective Payment Assessment Commission.

The AHA represents approximately 245 hospital schools of nursing as well as more than 3,500 personal members in the AHA-affiliated American Society for Nursing Service Administrators. Nurses are key figures in any hospital and they are assuming more responsibility in today's hospitals. Shortages of nurses persist in certain geographic areas and in the specialties such as neonatal and intensive care.

As employers and educators of health care personnel, hospitals are deeply concerned about adequate Federal funding of health professions education programs. To fulfill their commitment to deliver high quality care, hospitals need an adequate supply of qualified professionals and competent technical personnel. Moreover, hospitals are involved directly in all levels of health personnel training. They operate hospital-based schools of nursing, and offer clinical experience to undergraduate and advanced students in collegiate programs.

The ever increasing demands for skilled personnel make continued funding of health professions education programs more necessary than ever. With an aging population, we know that it is going to create problems down the road. Technological advances are creating new occupations each year, while making some old ones obsolete.

At a time when Federal payment and utilization control policies are encouraging shorter lengths of stay and greater use of outpatient services, hospitals are being called upon to provide more intensive services to a greater proportion of seriously ill patients.

I think you probably know that the GAO has done a study for Senator Heinz on discharging patients early, and one of the problems that we have with this new perspective pricing system is how to take care of that patient who is in a transition from an acute care setting before they are ready for a skilled nursing home, home health care, and other kinds of services which need personnel to take care of them.

We believe that it would be far more prudent to maintain the 1985 funding level of $224 million for this program. This amount is consistent with efforts to restrain the growth in Federal spending, while keeping important Federal commitment in these educational programs.

As far as the National Health Service Corps, we support funding for the National Health Service Corps field program at the 1985 level of $59 million. While this amount is $9 million more than the President's request for fiscal year 1986, it is still $10 million less than we spent in fiscal year 1984. It is a reasonable amount in view of this year's budgetary constraints.

We oppose the administration's plan to provide no new scholarships in the year 1986. We think that at least 150 should be funded.

We also support the $2.8 million appropriation request for the Prospective Payment Assessment Commission for fiscal year 1986. This level of funding is necessary to support the tremendous research requirements of the Commission so that the Commissioners may have a detailed, quantitative information base to accomplish its congressionally mandated responsibilities.

This Commission, as you know, was established to make sure that the prospective pricing system is working properly, that the calibration of the DRG is proper. A significant portion of these funds will be spent on studying the impact of the Medicare Prospective Payment System on the American health care system. The Commission has substantial and serious subjects to consider, and must have timely and reliable data on which to base its decisions, and sufficient funding for its research efforts will help provide that data base.

Health professions education and the Health Service Corps programs are investments in the future. The work of the Prospective Payment Assessment Commission is vital to assuring the continued high quality of health care for which this Nation is known. AHA believes that it is essential that adequate Federal support for these be continued. I realize the subcommittee has some difficult decisions to make this year, but I hope that you will keep these points in mind during your deliberations.

PREPARED STATEMENT

Senator PROXMIRE. Thank you. We will include your statement in the record.

[The statement follows:]

STATEMENT OF JACK W. OWEN

The American Hospital Association, which represents 6,100 institutions and 38,000 personal members, is pleased to have this opportunity to present its views on the Administration's Fiscal Year 1986 appropriations request for the Department of Health and Human Services. Three areas of the Administration's request for HHS are of particular interest to hospitals: (1) funding for health professions education; (2) funding for the National Health Service Corps; and (3) funding for the Prospective Payment Assessment Commission.

I am Jack Owen, Executive Vice President of the American Hospital Association, which represents 6,100 institutions and 38,000 personal members. I appreciate this opportunity to present our views on the Administration's Fiscal Year 1986 appropriation request for health professions education, the National Health Service Corps, and the Prospective Payment Assessment Commission.

The AHA represents approximately 245 hospital schools of nursing as well as more than 3,500 personal members in the AHA-affiliated American Society for Nursing Service Administrators. Nurses are key figures in any hospital, and they are assuming more responsibility in today's hospitals. Shortages of nurses persist in certain geographic areas and in specialties such as neonatal and intensive care.

As employers and educators of health care personnel, hospitals are deeply concerned about adequate federal funding of health professions education programs. To fulfill their commitment to deliver high quality care, hospitals need an adequate supply of qualified professionals and competent technical personnel. Moreover, hospitals are involved directly in all levels of health personnel training: they operate hospital-based schools of nursing; and offer clinical experience to undergraduate and advanced students in collegiate programs.

The ever-increasing demands for skilled personnel make continued funding of health professions education programs more necessary than ever. Technological advances are creating new occupations each year, while making some old ones obsolete. At a time when federal payment and utilization control policies are encouraging shorter lengths of stay and greater use of outpatient services, hospitals are being called upon to provide more intensive services to a greater proportion of seriously ill patients. Medicare's prospective pricing system undoubtedly will place additional demands on hospital personnel as incentives for cost-effective management have to be reconciled with the continuing responsibility to deliver high quality care.

For these reasons, AHA believes that the federal government should maintain its basic commitment to health professions education. Clearly, the President's proposal to slash funding by $221 million and provide no money for these programs in FY 1986, falls far short of this commitment. AHA believes it would be far more prudent to maintain the 1985 funding level of $224 million. This amount is consistent with efforts to restrain the growth in federal spending, while keeping the important federal commitment to these education programs.

The National Health Service Corps is a primary force in meeting the needs of medically underserved areas, and AHA strongly supports its work. Although the increasing supply of physicians and other health professionals has reduced the number of health manpower shortage areas--testimony to the success of the program--certain sections of the nation may never be able to attract and retain needed health personnel due to economic, social, or environmental conditions. AHA supports funding for National Health Service Corps field programs at the 1985 level of $59 million. While this amount is $9 million more than the President's request for FY 1986, it is still $10 million less than was spent in FY 1984, and is a reasonable amount in view of this year's budgetary constraints. AHA opposes the Administration's plan to provide no new scholarships in FY 1986. We believe 150 new scholarships should be funded in each of the next three fiscal years to keep a supply of physicians and health professionals in the pipeline for health manpower shortage areas.

AHA supports the $2.8 million appropriation request of the Prospective Payment Assessment Commission for FY 1986. This level of funding is necessary to support the tremendous research requirements of the Commission so that the Commissioners may have a detailed, quantitative-information base to accomplish its Congressionally mandated responsibilities. A significant portion of these funds would be spent on studying the impact of the Medicare Prospective Payment System on the American health care system. The Commission has substantial and serious subjects to consider, and must have timely and reliable data on which to base its decisions; sufficient funding for its research efforts will help provide that data base.

Health professions education and the Health Service Corp programs are investments in the future. The work of the Prospective Payment Assessment Commission is vital to assuring the continued high quality of health care for which this nation is known. AHA believes it essential that adequate federal support for these efforts be continued. I realize the Subcommittee has some difficult decisions to make this year, but I hope you will keep these points in mind during your deliberations.

Senator PROXMIRE. I understand that the chairman has negotiated a compromise which would result in continued funding for the health professions at the level of $240 million.

Mr. OWEN. Yes; we very much support that, and we are delighted to hear that.

Senator PROXMIRE. He is a great supporter of yours, and it looks as if you are going to be able to get something out of his efforts.

Mr. OWEN. I hope so.

Senator PROXMIRE. Thank you very much, sir.

STATEMENT OF WILLIAM PFAFF, M.D., CHAIRMAN, NATIONAL FORUM OF END-STAGE RENAL DISEASE NETWORKS

ACCOMPANIED BY JENNY KITZEN, EXECUTIVE DIRECTOR, CONNECTICUT END-STAGE RENAL DISEASE NETWORKS

Senator PROXMIRE. Our next witness is William Pfaff, chairman of the National Forum of ESRD Networks.

Dr. Pfaff, I understand that you are from Florida. You have a nice tan to show for it.

Dr. PFAFF. Senator Proxmire, I am Dr. William W. Pfaff, a professor of surgery at the University of Florida, and I appear in my role as the chairman of the National Forum of End-Stage Renal Disease Networks. I am accompanied by Jenny Kitzen who is the executive director of the Connecticut network as we anticipated Senator Weicker's presence. Had I known, I would have brought a colleague from the Midwest.

The end-stage renal disease networks are a peer review mechanism for overseeing that dialysis and transplant facilities, and the care of dialysis and transplant patients.

The reason that I am here is that the Office of Management and Budget had recommended defunding of the networks, and this request was repeated in testimony by Health Care Administrator Carol Davis.

Networks are located in the private sector. They are grant supported. Funds are derived from the Health Care Financing Administration. Management consists of unpaid professionals, as well as public members, they are physicians, nurses, social workers, and patients. They are supported by an administrative staff. The total administrative staff now consists of 108 individuals.

The task of the network principally revolves around the collection and processing of data. It involves the generation of that data, its verification, and then its transmission. This forms the core for patient care decisions, for comparisons of modes of therapy, particularly in the choice of dialysis and transplantation. It is the means to generate regional standards to gauge suboptimal performance, should that occur.

A related task is quality assurance. This is a multifaceted quality. It applies to regions, to facilities, to individuals. I see it as a means of using objective data to correct shortcomings. It also applies to the technique of self-assessment with end-stage renal disease facilities.

The networks are also an interface for patients with disputes with physicians, with facilities, and with Government. I think you know that it is lonely out there for patients who have problems. In these days of increasingly stringent medical expenditures, the Government has told the medical profession that they are the safeguard for both access to quality care, doctors and nurses are now responsible. The Government makes the funds available, but not that responsibility that we are to provide as the dollars shrink.

With concurrence, I am going to ask Ms. Kitzen to come up and give a couple of examples from the Connecticut network.

Ms. Kitzen. I will briefly give you three examples.

In Connecticut, the peer review process identified a group of patients who were inadequately dialyzed. The particular dialysis facility involved had to change their treatment protocols, and a new medical director leadership was appointed to that dialysis unit by the hospital as a result of our investigation.

We have recently struggled with the complex issue of how to treat patients with AIDS who require dialysis. Our concern has been for the protection of the rights of other dialysis patients, the dialysis staff, and for the patients who has AIDS.

Our third example is that we have reviewed the chemical analysis of water used in dialysis units and have determined that the quality of water in some of these units has not been acceptable for dialysis treatment. This has resulted in the installation of water treatment systems in these dialysis facilities to protect patients.

Dr. Pfaff. With the networks abolished, there is no real alternative. The professional review organization, the PRO's, are inexperienced. They deal with hospitals. They deal not with end-stage renal disease patients. They lack expertise. Further, they are expensive.

The history of funding of the end-stage renal disease networks was a high of $5.9 million in 1981, translated to current day dollars, that would be about $8 million. The current appropriation for this year was $4.8 million. It has been level for 2 years. I have suggested $6 million in my written request, but I think that it should be increased to $6.8 million after my meeting with my colleagues this past weekend.

With more reasonable funding, we can improve our data. We can aim and complete a registry of dialysis and transplant patients, something we had in the 1960's, when we were smaller, but it has been abolished with the promise that the medical information system would work.

We need to restore some initiatives in our program. My own preference is to increase initiatives in rehabilitation. We are not doing enough in that regard at all.

In summary, I personally believe that Congress has a moral obligation to mantain and improve peer oversight for the expenditure of public dollars. The end-stage renal disease network has been a nice experiment. It is an experiment that has succeeded. I think that we can do better.

Senator PROXMIRE. Thank you, Dr. Pfaff.

The Office of Technology Assessment recently came out with a report that said that $10 million could be saved if dialyzers were reused. Is there any work being done on the safety of reuse?

Dr. PFAFF. Tremendous, as a matter of fact, it is a common practice for about one-half of the dialysis patients that are being cared for today.

Senator PROXMIRE. Is the Office of Technology Assessment correct?

Dr. PFAFF. I think so from the observations in our individual networks. We have looked at it closely on our own. We have more work to do with it. It is just a growing practice because of the cutback in the payment for dialysis.

Dialysis costs $150 per event in 1973. It costs about $123 per event in 1985. That is amazing.

PREPARED STATEMENT

Senator PROXMIRE. That is real progress.

Thank you very much. Your statement will be placed in the record.

Dr. PFAFF. Thank you, sir.

[The statement follows:]

STATEMENT OF DR. WILLIAM PFAFF

Summary

There is little argument that the End-Stage Renal Disease (ESRD) program has been effective in salvaging lives and providing access to care for patients with renal failure. There has been, on the part of the professional personnel involved, little dispute that the ESRD Networks have been an important and inexpensive element of that success.

The ESRD Networks are local organizations, are in the private sector, and are devoid of professional salaries. They have provided peer review, accurate data collection, quality assurance and grievance mechanisms for patients and facilities.

In the past four years, the funding of the Networks has declined 24%, the patient population has grown some 11% annually. Considering inflation, the adjusted 1981 budget would have resulted in a 1985 Network budget of $8,000,000.

To complete the functions desirable by Congress, patients and the health professions, the ESRD Networks suggest an appropriation of $6,000,000 for the forthcoming fiscal year.

Mr. Chairman and members of the Committee, I am William W. Pfaff, M.D. of Gainesville, Florida. I am a Professor of Surgery at the University of Florida and Director of the Transplant Programs. I am also Chairman of the National Forum of End-Stage Renal Disease (ESRD) Networks and it is in that role that I appear before you.

The Forum of ESRD Networks consists of representatives of each of the thirty-two Networks that are components of management in the conduct of renal dialysis and transplant programs in this country.

Our request to testify before the Committee is in response to the Administration's budget that deleted funding for the Networks in the forthcoming fiscal year. This requested deletion has been a recent annual event. Congress replied last year that defunding should not be considered until the Administration documented that the Network functions, particularly the generation of accurate and timely data, could be completed by other cost effective mechanisms or organizations. To date, these alternatives have not been identified.

BACKGROUND

The Networks were created by the Federal Regulations that generated the Renal Medicare program and were instituted in October, 1977.

There are 32 independent ESRD networks, each a not-for-profit organization consisting of members from every ESRD facility in its geographic boundries. Depending on population base, a Network might serve half of a large state (e.g., California), a single state (e.g., Florida), or all or parts of multiple states (e.g., Tennessee, Mississippi and Alabama). Participants in the Networks elect officers and committee members but must include physicians, nurses, social workers, and patients. These participants are unpaid. There is a paid full-time staff, averaging 3.5 persons/network, or roughly 100 employees for the national program.

The Networks are sustained by individual grants from the Health Care Finance Administration. The appropriation for the current year was $4,837,000. This represents 2.42 thousandths of the 2 billion dollars expended by the Medicare program for ESRD management to this often identified cost. Additional funds are expended in Social Security Disability Payments, third-party insurance coverage and personal out-of-pocket expenses. The HCFA Network appropriation has decreased from 1981-1985 despite the inflationary trends of the earlier years of this decade, the growth of the ESRD population during the interval, and additional functions assigned to the Networks.

Network Responsibilities

A. Data Collection

Improvements in medical care occur only after and with access to sound data. Expenditure of public funds should occur with the same advantage.

From 1973-1981 we were told that the HCFA Medical Information Service would be able to provide the scientific, demographic and financial data that was needed for professional decisions, program management and Congressional oversight. This approach failed and the data summaries that were produced were inaccurate and untimely. The seeming reasons for failure were organizational, HCFA's late access to the data, lack of professional input, and perhaps most important, the lack of local editing and verification. As of January, 1982 the responsibility for data collection, editing and verification was assigned to the Networks. The ESRD Network data now is complete, is editied, is verified. The data can be used immediately for local purposes. Access to the Network product has resolved some of the delay and inaccuracies of earlier HCFA reports. The difference in these eras was the human element, Network personnel who were in frequent communication with those individuals in dialysis and transplant units who were responsible for data from their institutions.

In 1983, the Networks adopted uniform data collection, standardizing elements of information that were sought by the scientific community as represented by the Data Committee of the Forum. In 1985, we are in the midst of our first experiments in national data aggregation.

B. Quality Assessment

The first level of quality addresses the outcome of patients served in the state, an area of the state, or individual facilities when compared with national standards. The task of peer review is totally dependent on the data function of the organization as well as knowledgeable and respected individuals to act in the role of judging the performance of others.

A more recent description of quality assessment includes techniques of ongoing self-criticism in individual facilities to allow recognition and correction of problems before they are overt. Most, if not all, networks have established programs to develop and disseminate skills that are newly described to meet this aim. This role is particularly important in a time that funding is being curtailed and that the health professions have been told that they must assume responsibility for access to care and the quality of medical care.

C. Interface Between Patients, Physicians, Facilities and Government

The interplay between individuals and/or organizations invariably result in conflicts. The Networks have surfaced as a dispassionate site for clarification and resolution of disputes, utilizing lay and professional participants to resolve disagreements that exceed the expertise of other local organization or governmental offices. It was with recognition of this role that the National Association of Patients on Hemodialysis and Transplantation (NAPHT) approached the Networks to serve as the instrument of a national and regional patient grievance system.

D. Conduct Educational Programs

As advances occur in the management of renal failure, patients the professions and the public need to be advised. The steady growth of home dialysis and transplantation is the product of education, often based on local experience as reported with local, verified, peer reviewed data.

E. Problem Solving

The Networks have been able to solve local problems. For example, disaster planning needs vary widely from area to area, and has different implications for ESRD patients. Practices of dialyzer re-use, as another example, vary widely in this country, yet standards must be created for common protection of our patients. The response time of governmental bodies is too slow to respond to changes that occur or that cannot be foreseen or recognized from a national perspective.

Alternatives to Current Network Structure

1. Central Reporting of Data to HCFA

With a history of inaccuracy and delay, it would seem imprudent to repeat the experiment of 1973-1981. Additional HCFA personnel would be required, and local communications for verification would be expensive. The other Network functions would be lost.

2. Assign the Responsibilities to Professional Review Organizations (PRO)

The PRO's are new organizations with massive problems of their own. They lack outpatient experience, special expertise, an ESRD data base, familiarity with the existing ESRD system. Further, professional costs are compensated, adding expense to complete the task.

3. Reduce the Number of Networks to Lesson Costs

This suggestion was explored by Congress last year and has been discussed in various circles. My colleagues have concluded that personnel costs would not be lessened given the current patient load and that travel expense would be increased.

Conclusion

Were the Networks abolished, data gathering would have to begin anew and with reduced potential for accuracy. Quality assurance and access to care would be devaluated. The capacity to solve patient grievances would be compromised. Network contributions to public and professional education would be lost.

Request of Congress

Acknowledging that the goal of Congress is to reduce expenditures in this budget, the Forum respectfully requests increased funding for the forthcoming year. An increase to $6,000,000 would partly compensate for the inflation influenced reduced funding of recent years. The intended uses of augmented grant support would include:

1. Standardization of data management. Current practices, hardware, software and formats vary widely. It would lessen personnel expenditures in the Networks and HCFA if compatible operations were established.
2. Create a national registry of dialysis and transplant patients. The principle goals are to:
   a) Provide national standards,
   b) Identify outcome of uncommon diseases,
   c) Allow judgement of quality and cost effectiveness of various modes of management, e.g., chronic ambulatory peritoneal dialysis, transplantation.
3. Innovation in patient rehabilitation. The current rate of actual rehabilitation is short of the rate for potential rehabilitation. Pilot studies to foster a return to employment would lessen disability payments to a current 37% of the dialysis population.

Request of the Administration

1. Cease the yearly skirmish over the budget. The annual uncertainty over continued life of the Networks impair productivity, personnel decisions and motivation.
2. Improve coordination and direction by HCFA. The major link between the Networks and other governmental bodies is through HCFA. Yet the relationship with HCFA has been tenuous. We would appreciate improved coordination and direction from HCFA, cooperation with their staff in developing better means of performing our tasks.
3. Establish goals and standards of performance with reporting to the Networks and to Congress. Neither individual networks nor Congress have received reports on the End-Stage Renal Disease Program in recent years. We have no good measure of our own performance other than our own insight. We would welcome objectivity and would hope that objective measures might be used in reporting to Congress and to the Administration.

STATEMENT OF BERNARD A. KERSHNER, PRESIDENT, FREESTANDING AMBULATORY SURGERY ASSOCIATION

Senator PROXMIRE. The next witness is Mr. Bernard Kershner, president of the Freestanding Ambulatory Surgery Association.

Mr. KERSHNER. Senator Proxmire, I appear here in my capacity as president of the Freestanding Ambulatory Surgery Association [FASA], which is a national association whose membership represents almost one-half of all the freestanding surgery facilities in the United States.

FASA's primary concern is to ensure the provision of high quality health care for patients in ambulatory surgery center setting. As I appear before you today, there are approximately 250 such facilities throughout the country. It is estimated that by 1988 that number will more than double, and will approach 1,000 by the early 1990's.

Surgical centers are universally acclaimed as having a dramatic and potentially exciting impact on the health care delivery system. There is a widely held view, both in Government and the private sector, that cost-effective changes can occur through the introduction of competition. Indeed, the American Hospital Association last year acknowledged that there was a reduction in the overall bed allocations throughout the country of something approximating 11,000 beds. Clearly, the advent of surgical centers did not singularly create this reduction in beds, but Carolyn Davis and others have acknowledge that upward of one-third of all the inpatient surgery that had been done in hospitals had shifted to the outpatient environment.

It is generally acknowledged that this percentage can be even as high as 50 percent nationwide.

This set of circumstances is only one demonstration of what are the benefits of competition. There now exists an alternative to hospitalization. The Medicare Program acknowledged the cost effectiveness of surgical centers.

When, as part of the Omnibus Budget Reconciliation Act of 1980, the first reimbursement was put into place, the intent clearly was to create an environment that would stimulate increased utilization of these facilities in such a way to change fundamental medical practice patterns, and thereby generate savings for Medicare beneficiaries.

The Congress should be applauded for recognizing this 5, even 6 years ago. Despite, however, the intent of Congress it took over 2 years before the regulations became effective. In 1982, ICFA first presented a list of approved procedures, and that list was to have been updated and modified over the course of the years. This has never happened. The modifications were to take into account changes in practice patterns, changes in medical events technologically, and this has not happened.

On at least two occasions since 1982, FASA and other responsible professional groups submitted detailed information to HCFA calling for and encouraging an expansion of the list, and this has not happened.

To limit the use of surgical centers by means of this list is terribly inappropriate to our way of thinking, and certainly would seem to fly in the face of logic, and result in severe underutilization of these facilities by Medicare beneficiaries.

Clearly the increased use of surgery centers by Medicare patients is precisely what the Congress intended. However, because of the delays, the intent is being thwarted.

One of the major impediments to increased used of ambulatory surgical facilities in general is a reimbursement system that has traditionally favored inpatient care. In the private sector, this is changing. Many private companies are now creating financial incentives, putting financial incentives in place both for physicians and patients, to encourage this shift. Indeed this is what Congress intended to do back in 1980.

Ironically, this has not happened. The reimbursement system applicable to Medicare certified ambulatory surgical centers differs dramatically from the Medicare approved facilities in the outpatient departments of hospitals. In the freestanding center, the reimbursement is based on a fixed facility rate for each procedure on the list that I have mentioned. For example, a facility rate paid for a cataract extraction procedure, which in yesterday's Congressional Record Carolyn Davis singled out as being—let me quote this: "Cataract surgery, for instance, repeatedly has been identified by 54 peer review organizations as one of the leading candidates for transfer to the outpatient setting, and yet, I can tell you that in tracking such procedures last year, cataract surgery was our leading DRG in terms of volume of inpatient surgery." You will understand the relevance of that in a moment.

Facility rates paid for cataract extractions, as I mentioned, in the surgical center setting is approximately $500. The same procedure on an outpatient basis in a hospital is receiving Medicare reimbursement anywhere between $1,100 and $1,100 and $1,600, a difference of between $600 and $1,100.

The America Intraocular Implant Society, which tracks such volumes of procedures, has determined that anywhere between 600,000 and 750,000 such procedures are performed annually in this country. The arithmetic is easy, $1,200 times 600,000 indicates a cost to the Federal Government of something over $720,000. If these operations were performed in surgical centers, and even if the existing Medicare rates to those centers were increased by as much as 50 percent, to more accurately and realistically cover the cost of those centers, the savings would still be something approaching $300 million.

It is FASA's view that the American people now have an alternative to them, a safe alternative and an effective alternative. A program which was intended to be implemented by Congress 5 years ago must be implemented. There must be equitable and consistent reimbursement for surgical procedures on Medicare beneficiaries whether they are done in the surgical center setting or in a hospital setting.

With this philosophy the potential for savings literally will be in hundreds of millions of dollars.

Thank vou very much.

Senator PROXMIRE. Mr. Kershner, bless your heart and thanks a million. I once asked a former staff director the ratio of witnesses who appeared before the committee asking for more money to those who asked for cuts. He said that it was about 1,000 to 1.

You aren't asking for a cut in services. You want better services, but you have a better way of doing it which is less expensive.

Mr. KERSHNER. Precisely.

Senator PROXMIRE. We can save money by using outpatient care far more aggressively than we do.

Mr. KERSHNER. Precisely.

Senator PROXMIRE. Have you appeared before the Finance Committee?

Mr. KERSHNER. No; I have not.

Senator PROXMIRE. That is the committee with jurisdiction over authorizations and changes in procedures of the kind that you recommend, although it is very helpful for this committee to have that information, too. I suggest that you consider testimony before the Senate Finance Committee and the Ways and Means Committee of the House.

You have done an excellent job.

PREPARED STATEMENT

Mr. KERSHNER. Thank you very much.

[The statement follows:]

STATEMENT OF BERNARD A. KERSHNER

The Freestanding Ambulatory Surgery Association (FASA) is a national association whose membership of over 110 freestanding ambulatory surgical centers represents more than 350 doctors, nurses and other health professionals involved in ambulatory surgical care. FASA's facilities membership represents almost half of all freestanding ambulatory surgery centers in the United States.

FASA was founded in 1974 with the following objectives:

(1) To foster the public good through the provision of quality health care in the form of ambulatory surgery.

(2) To act as spokesperson and representative to present the views of the ambulatory surgical care industry in any appropriate forum.

(3) To acquire, develop, and disseminate research, statistical, and other information relating to the ambulatory surgical field.

(4) To develop and encourage the practice of high standards of professional conduct among individuals providing ambulatory surgical care.

(5) To provide opportunities for members to increase their knowledge of ambulatory surgical care practices and methods and to increase their individual capabilities.

(6) To support the efforts of its members in expanding their ever-increasing roles and responsibilities in meeting community health needs.

Additionally, FASA was the first organization to develop standards for ambulatory surgical facilities and to implement those standards in conducting a facility accreditation process. This process was subsequently superceded by the accreditation program of the Accreditation Association for Ambulatory Health Care (AAAHC), of which FASA is a charter member organization.

FASA's primary concern is to ensure the provision of high quality health care for patients in ambulatory surgery centers.

Freestanding ambulatory surgery centers provide a safe, cost effective surgical environment for their patients. A 1981 study by the Health Care Financing Administration (HCFA) found that freestanding ambulatory surgical facility rates averaged 55% less than the same procedure performed in an inpatient setting, and 18% less than a comparable procedure performed in a hospital outpatient setting.

The growth of ambulatory surgical centers, both freestanding and hospital affiliated, began 15 years ago. As I appear before you today, there are approximately 250 freestanding surgical centers in operation throughout the United States. It is estimated that by 1988 that number will more than double and will approach 1,000 by the early 1990's. Surgical centers are almost universally acclaimed for having a dramatic and in many cases, exciting impact on the health delivery system by introducing competition into an otherwise staid medical environment.

There exists a widely held view both in government and the private sector that effective long-term medical cost containment could be achieved with a substantial reduction in the present supply of hospital beds. It is therefore, of great significance that for the first time since the American Hospital Association (AHA), began recording such information back in 1963, the overall number of hospital beds declined last year by almost 11,000 beds. Clearly, the advent of surgical centers is not singularly responsible for this phenomenon, but both Carolyne Davis, Administrator of the Health Care Finanancing Administration (HCFA), and Alexander McMahon, President of the American Hospital Association, recently have acknowledged that this reduction is due in part to a shift of one-third of inpatient surgery to the outpatient setting most notably, the ambulatory surgical center setting.

This set of circumstances is a clear demonstration of only one of the many benefits of introducing competition into the medical delivery system. There now exists a clear cut cost effective alternative to traditional forms of surgical care which can more readily alter existing practice patterns through a shift from the inpatient setting to the outpatient setting, thus contributing to a shrinkage of the overall health system by eliminating unused clinical facilities and closing beds.

The Medicare program acknowledged the cost effectiveness of ambulatory surgical centers when as part of the Omnibus Budget Reconciliation Act of 1980, it first provided reimbursement to these centers. That enabling legislation was creative and forward thinking in that it produced financial incentives to physicians and patients alike for having surgery performed in this new settting. The intent clearly was to create an environment that would stimulate increased utilization of surgical centers in such a way as to change fundamental practice patterns. The Congress should be applauded for having recognized in 1980 that beneficial and cost effective changes in practice patterns can be encouraged and accelerated. Despite the clear intent of Congress, it took two years for the executive branch to implement this legislation by publishing conforming regulations.

In 1982, HCFA first presented a list of "approved" surgical procedures which would be eligible for medicare reimbursement. This list contained less than 100 such procedures. It was announced by HCFA officials that the list would be revised and updated periodically in order to accommodate changes in both technological advancement and practice patterns. On at least two occasions since 1982, FASA and other interested professional groups have submitted detailed information justifying a significant expansion of the original list of procedures. To date, HCFA has made no adjustment in this list. Since there is no such restrictive list for hospital based outpatient surgical programs, the regulators are obviously biased against non-hospital based ambulatory surgical facilities. To limit the use of surgical centers by means of a woefully inadequate and restrictive list of authorized surgical procedures is to fly in the face of logic and results in severe under utilization of freestanding centers by Medicare beneficiaries.

Clearly, the increased use of surgical centers by Medicare patients is precisely what the Congress intended and yet because of bureaucratic delays, that intent is being thwarted with a consequent reduction in the cost saving potential of such centers.

One of the major impediments to increased use of ambulatory surgical centers has been a reimbursement system which has traditionally favored inpatient, or hospital based care. In the private sector, this is now changing. In a study compiled in 1984, 1185 companies were surveyed about their health care cost management practices. Thirty-nine percent of these companies offered financial incentives for outpatient surgery to either patients or physicians and another 30 percent are considering adopting such incentives.

Ironically, although the Congress intended to follow a similar path, the exact opposite has been the case and the traditional hospital programs are continuing to receive higher levels of reimbursement.

The reimbursement system applicable to Medicare certified ambulatory surgical centers differs significantly from Medicare reimbursement applicable to hospital outpatient departments. Medicare-certified ambulatory surgical centers are paid a fixed facility rate for each surgical procedure on the restricted list of "covered" surgical procedures.

For example, the facility rate paid for cataract extractions/lens implantations, depending on regional variations, approximates $500. This rate is significantly lower than the amount paid if a cataract extraction/lens implantation is performed in a hospital outpatient department. When this service is performed in a hospital, reimbursement is based on "reasonable costs". Medicare pays 80% of the outpatient department's actual costs, and the beneficiary is required to pay a 20% coinsurance amount, plus any applicable deductible. Typically, the rates reimbursed hospital outpatient departments range between $1100 and $1600, a difference of between $500 to $1100 per procedure from the freestanding center's rate.

Information made available by the American Intraocular Implant Society, which is responsible for intraocular lenses following cataract operations, indicates that as many as 600,000 to 750,000 cataract operations are performed annually in the United States. If you take an average Medicare reimbursement rate of $1,200 and multiply it by 600,000 the cost to the federal government is almost $720 million on cataract operations alone. If these operations were performed at ambulatory surgical centers, and even if the Medicare rates were raised as much as 50% to more reasonably cover the actual costs of providing services in most centers, the savings to the Medicare program will still approximate $280 million.

Mr. Chairman, it is FASA's view that the American people now have available to them a new, safe cost effective surgical environment in which to have appropriate clinical procedures performed.

The program which was intended to be implemented by Congress five years ago must now be brought to fruition so that its benefits to the public interests can finally be realized. The deficiencies in the regulations must be corrected, the list of procedures must be expanded, and reimbursement rates, which have never been adjusted, must be increased if the original goals are to be attained.

STATEMENT OF JAMES D. ISBISTER, SENIOR VICE PRESIDENT, BLUE CROSS AND BLUE SHIELD ASSOCIATION

Senator PROXMIRE. Our next witness is James Isbister, senior vice president of Blue Cross and Blue Shield.

Mr. ISBISTER. Thank you, Mr. Chairman. It is a pleasure to be here.

Senator PROXMIRE. You are a big force in my State. We are very proud of you. You are doing a fine job.

Mr. ISBISTER. Mr. Chairman, I have a statement that I would like to submit for the record.

Senator PROXMIRE. Your full statement will appear in the record.

Mr. ISBISTER. Let me just highlight a few high points.

I appreciate the opportunity to appear on behalf of the Blue Cross and Blue Shield Association to testify with respect to the Medicare budget.

We appreciate very much the role that this committee in particular has had over the years in seeing to it that the contractor budgets were adequately funded.

Picking up on the theme that you just struck with Mr. Kershner, I guess the essence of my message, Mr. Chairman, is that with respect to the Medicare Administration, I think that one can get a return on the investment, that is to say, you can spend money for adequate administration, and the consequence of that is that you can realize very substantial savings in terms of benefit payouts.

We are in the business of administering that program together with the commercial insurance companies, and you are going to be hearing from somebody with HIAA under contracts with the Government. Some of the return ratios are on the order of $5 return for $1 spent, up to $30 for $1 spent, by testing simple things like eligibility, and more complex things like medical review and utilization review, audit, and so on and so forth.

We believe that it is penny-wise and pound-foolish to cut this budget too close to the margin. We believe that the President's budget for 1986 does that. Indeed, the administering agency, HCFA, has so testified, I believe, before this committee to that effect.

We believe that if this budget is not increased there will be three effects. One is that some opportunities may be lost for doing adequate management of the benefit payout. The second is that there will be some deterioration in service, that is already occurring, backlogs in terms of claims processing, as the administrative budget is being tightened. Finally, it is going to force, ultimately, more and more toward doing things solely by computers in larger and larger systems, and less and less with the human dimension, and the human dimension is very important.

Having said that, I think that we and the commercial insurance companies are very proud of the record of efficiency that we have achieved. Attached to the testimony here are some charts which show how our costs on an inflation adjusted basis have gone up considerably. But there are limits on how much you can make up by way of budget cuts, and by further and further computerization, and we think that this budget really cuts too close.

[The statement follows:]

STATEMENT OF JAMES D. ISBISTER

Mr. Chairman and members of the Subcommittee, I am James D. Isbister, Senior Vice President of the Blue Cross and Blue Shield Association, the national coordinating organization for all Blue Cross and Blue Shield Plans. The Association serves as the Medicare Part A intermediary prime contractor. Our Member Plans serve as Part B carriers and perform Part A intermediary functions as subcontractors to the Association.

We appreciate the opportunity to appear before you on the subject of the Administration's budget request for Medicare contractors. This subcommittee has long recognized the wisdom of providing a strong administrative base to the Medicare program to assure that benefit payments are made properly and on a timely basis. During the last several years this subcommittee has taken the lead in providing the needed stability and consistency in Medicare administration by providing adequate levels of funding for Medicare contractors. We appreciate your leadership in this area.

This year, we are concerned about the adequacy of the Administration's budget request for Medicare contractors. Given the rapid pace of complex program changes that have occurred in Medicare and the prospects for further changes as part of this year's deficit reduction efforts, the Administration's budget involves two serious risks: (1) that the outflow of benefit dollars for FY 1986, projected to be $75 billion, will not be as tightly controlled as they should be, and (2) that administrative services for the beneficiaries and providers may be diminished or unnecessarily disrupted in several places around the country.

It is important to note that the Health Care Financing Administration (HCFA) divides the contractor functions into two major categories: claims processing and program safeguards. The program safeguard category includes such functions as audit, medical review, and ensuring that Medicare is the "secondary" payer whenever some other payer should be primary. Over the last several years, those program safeguard activities have received sufficient funding and the results have been rewarding. The payback ratios, in terms of benefit dollars saved versus administrative dollars spent, have ranged from 5:1 to 30:1.

The other major category of contractor functions - claims processing - includes those activities necessary to process and pay promptly and accurately claims for Medicare covered services. For FY 1986, there will be approximately 350,000,000 Medicare claims, an increase of 36,000,000 over FY 1985. Our major challenges are to assure that the claims forms are understood and properly submitted, and then to run those claims through a myriad of screens and audits—both automated and manual—to ensure that the services are covered, that the charges are reasonable, and that Medicare pays only what remains after other third party payers have discharged their own responsibilities. We perform these functions in accord with applicable law, regulations and detailed operating instructions issued by HCFA. These claims processing functions have demonstrated their value; not only have the costs per claim processed dropped steadily over the years but claims processing activities have provided the foundation on which all the program safeguard activities stand.

The claims processing and program safeguard functions of the contractors, for FY 1985, represent approximately 1.3% of Medicare benefits paid. That is an impressively low figure, but if the contractors' funding is reduced below minimally adequate levels, especially for the claims processing functions, the strength of all the program safeguards is certain to be diminished - and that is a prospect we face for FY 1986.

What is most difficult to understand, in terms of the Administration's budget, is that if our record demonstrates anything, it is that good claims and benefits administration more than pays for itself. Whether measured by administrative cost per claim, or benefit savings via audit and medical review, or the ratio of administrative cost to benefits paid, the record is impressive. The charts attached to this testimony show the Blue Cross and Blue Shield experience, as Medicare contractors, over the last 10 years.

The Current Situation

Before looking at FY 1986, it is helpful to review the adequacy of the FY 1985 budget, especially for the last quarter of FY 1985. It establishes the base for the FY 1986 budget. It appears likely that the funds now available to contractors from the FY 1985 appropriation are not sufficient given the volume of claims, the necessary quality controls, and the programmatic changes which are occurring. The reasonable costs of most contractors for the first third of this fiscal year exceeded the budget targets set by HCFA due primarily to factors not anticipated when budgets were prepared last spring, such as:

- changes mandated by P.L. 98-369 (DEFRA), especially the new payment provisions regarding clinical diagnostic lab tests, durable medical equipment and physician fees;
- higher than expected data entry requirements and error rates resulting from implementation of the new uniform bill for hospitals;
- corrections to paid claims (referred to as "adjustments") made by providers and by Peer Review Organizations (PROs); and
- full implementation of all the legislative provisions regarding Medicare as secondary payer.

Because of the budget shortfalls for FY 1985, some performance standards relating to the timeliness of claims processing and claims backlog will have to be reduced. Discussions are beginning now with HCFA to reach agreement on how this can best be handled. HCFA has now requested the release of $16 million of the FY 1985 contingency fund that is held by the Office of Management and Budget. If these funds are released, it will help but will not obviate the need for the reduction of some performance standards.

It is important to note, incidentally, that the programmatic changes listed above, and many others like them that have been mandated in the last few years, have added to administrative complexity - at least in the short run - and that inevitably adds to the administrative burden on contractors. Even so, the contractors' cost per claim has generally continued to drop. Contractors are justifiably proud of this record. It is also a record we are confident we can extend through FY 1986 - but not at the level proposed by the Administration.

The Risks of FY 1986

For FY 1986, the administrative structure of Medicare will face a serious problem. The funding for this critical function proposed in the Administration's FY 1986 budget will demand cost reductions which far outstrip the ability of the contractor community to meet through increased operating efficiency. As a result, there is a high risk of a deterioration in service to beneficiaries and providers and a diminishment in the capacity of the administrative structure to control benefit payouts.

In response to the FY 1986 budget situation, some contractors are now wrestling with the choice of absorbing part of their reasonable costs of performing Medicare functions or withdrawing from the program. Other contractors are considering major reductions in their administrative capacities to handle Medicare functions, through reductions in trained staff or in the scope and intensity of their activities. All of these responses pose serious risks to the program.

Balancing such potential risks with a strong commitment to budget restraint, HCFA recommended that the FY 1986 budget provide $957 million for Medicare contractors. This amount included a figure of $547 million for claims processing. The final figure approved for the Administration's budget request, however, was $920 million, and includes only $478 million for claims processing, a cut of some $70 million below the amount HCFA recommended as necessary for effective and efficient program administration.

How does HCFA intend to achieve the $70 million in claims processing savings? In two ways: first, it is proposing a series of administrative changes, such as eliminating the "Notice of Admission" procedure for hospitalizations, which it assumes will save $35 million in the aggregate; and second, HCFA assumes that every contractor will reduce its Medicare claims processing costs to a level not higher than the 25th percentile of all contractors' FY 1985 budget targets. The second approach would save the other $35 million.

Our review of HCFA's plans reaches two conclusions: (1) not more than $15 million of the "administrative savings" will actually be realized; and (2) it is not possible for 75% of all the contractors to drop their costs to the level of the lowest cost contractors, certainly not in the several months remaining between now and FY 1986. We agree with HCFA that more efficiencies can be achieved, and there is continuing movement in that direction. Forcing the depth and range of cost cutting that HCFA now intends - in a six month period - will risk substantial disruption in Medicare program operations.

We are particularly concerned about the short-term disruption and long term deterioration in service to beneficiaries, providers, and the program that will occur if some contractors are forced to withdraw from the program because of inadequate funding. In response to a contractor withdrawal, HCFA would likely seek to shift the former contractor's responsibilities to other incumbent contractors. These contractors might be geographically distant from the beneficiaries and providers served by the previous contractor.

The Blue Cross and Blue Shield Association has worked closely with HCFA in the past to achieve administrative efficiencies through the consolidation of larger volumes of claims in selected areas. In these cases, we have demonstrated that greater efficiencies can be achieved without sacrificing local services. For these efforts to be successful, however, a great deal of time, cooperation, and planning was necessary. They could not have succeeded in an environment dominated by the short-term pressure to fill an immediate void left by a contractor forced to withdraw from the program because of inadequate funding.

We are concerned about the long run implications to the Medicare program of a move towards fewer and larger contractors covering larger and larger territories. We believe that such a contractor consolidation strategy risks the loss of local service and the loss of opportunity for more effective cost management programs. Our experience, especially in the private marketplace, where there is more flexibility to try varied new approaches, is that a local presence is essential to customer satisfaction and to achieving greater efficiencies in the delivery and financing of health services.

An Adequate Budget

Based on its original budget recommendation, HCFA considered $957 million to be an adequate level of funding for Medicare contractors for FY 1986. Our own estimates suggest that $995 million, or 8% more than the Administration's request, is needed. This estimate assumes a 6% increase in productivity, a 4.5% rate of inflation, and a 10% increase in claims workload. We have assumed about the same level of funding for program safeguard activities as provided in the Administration's request; thus, the major difference is in funds for claims processing. Importantly, our estimate assumes the continuation of HCFA's FY 1985 administrative policy of achieving greater efficiencies by reducing the range of contractors' unit costs of claims processing towards the median — 50th percentile — cost level.

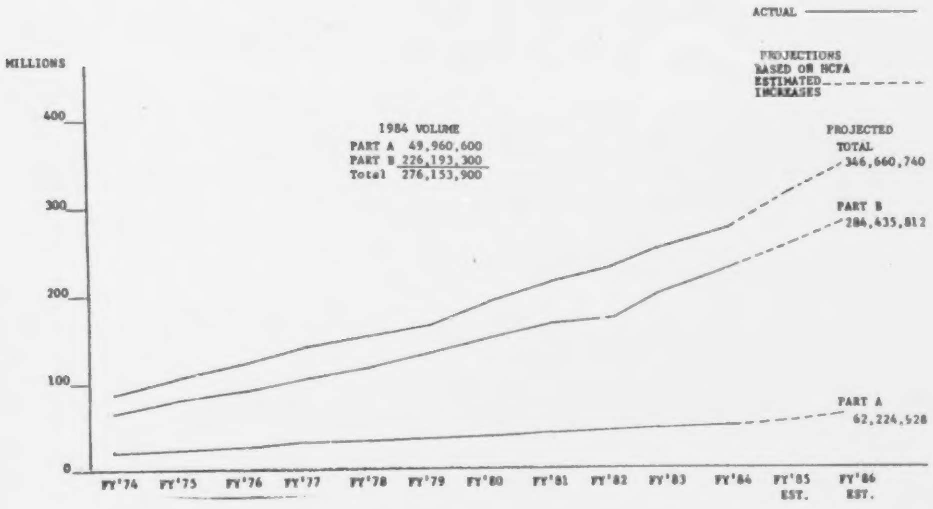
We are confident that whatever the specific amount of additional funding the Congress might appropriate for Medicare administration, at least that amount of money will be saved in benefit payments. We are equally confident that without adequate funding of the contractor operations, much more than the additional funds we seek will be at risk through inappropriate benefit payments.

Conclusion

The Blue Cross and Blue Shield Association urges your favorable consideration of an increase in the budget for Medicare contractors for FY 1986. Based on our estimates we recommend that $995 million be provided, which represents an 8% increase over the Administration's request.

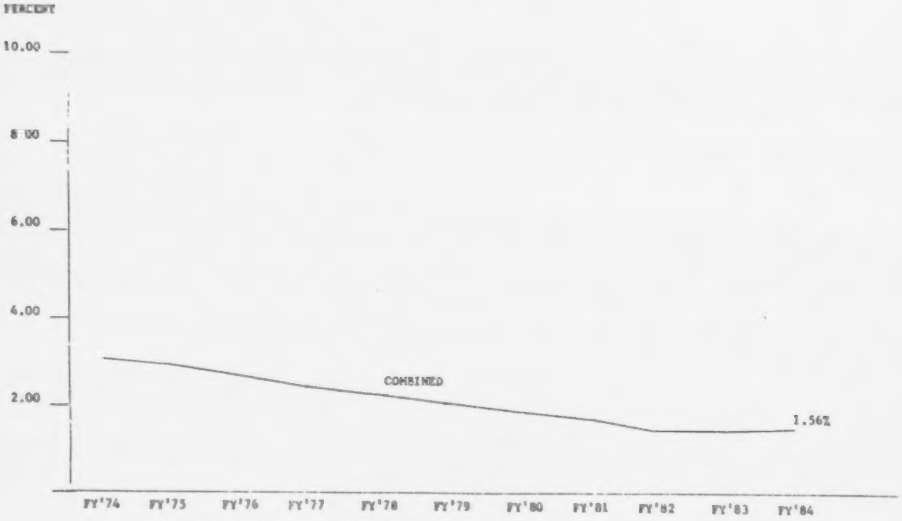
ATTACHMENT A

MEDICARE
PART A, PART B, AND TOTAL
ALL CONTRACTORS - PLANS AND COMMERCIALS
CLAIMS VOLUME



ATTACHMENT B

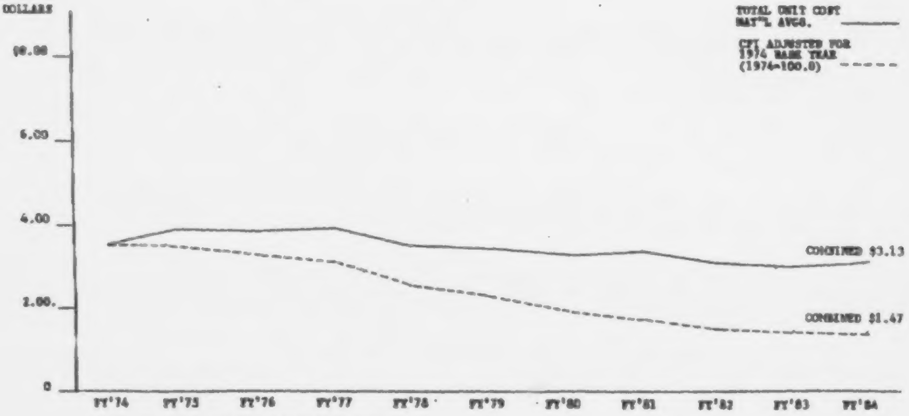
MEDICARE
ADMINISTRATIVE COSTS AS A PERCENTAGE OF BENEFIT PAYMENTS
BLUE CROSS AND BLUE SHIELD PLANS



Note: Excludes all Fixed Price Contractors

ATTACHMENT C

MEDICARE
BLUE CROSS AND BLUE SHIELD PLANS
TOTAL UNIT COST NATIONAL AVERAGES
ADJUSTED FOR INFLATION
BASE YEAR 1974



Note: Excludes all Fixed Price Contractors

Senator PROXMIRE. Thank you very much. You presented very good testimony.

You were here during Mr. Kershner's testimony. Do you have any reaction to his statement?

Mr. ISBISTER. I am sorry, Mr. Chairman, I have to confess that I was talking with Mr. Jacoby.

Senator PROXMIRE. Mr. Kershner discussed the use of outpatient facilities for surgery, particular with respect to cataract surgery.

Mr. ISBISTER. Our association and our plans are always looking for opportunities to do on an outpatient basis, or on a laboratory basis. With respect to cataract surgery per se, I am not an expert on that. The payment folks, I know, look at that carefully through the Medical Review Committee, and I will be glad to submit something to you.

Senator PROXMIRE. If you have a chance to read Mr. Kershner's statement, perhaps you could give us your reaction to it.

Mr. ISBISTER. Thank you very much, Senator.

STATEMENT OF LUTHER E. CARTER, CHAIRMAN, MEDICARE ADMINISTRATION COMMITTEE, HEALTH INSURANCE ASSOCIATION OF AMERICA

Senator PROXMIRE. Our final witness is Luther Carter, vice president of Travelers Insurance Co., Health Insurance Association of America.

Where is Travellers located?

Mr. CARTER. Hartford.

Senator PROXMIRE. We are happy to have you, sir.

Mr. CARTER. I am Luther E. Carter, vice president of the Travelers Insurance Co. With me is Geza Kadar, who is assistant Washington counsel for the Health Insurance Association of America.

We are here representing the nine commercial insurance companies involved in administering the Medicare Program. I would like to say that I agree with all the comments that Mr. Isbister has made.

The Medicare Program has been a very successful one due to the hard work of a lot of companies that administer it. The purpose of us being here today is to alert the committee to what we consider to be the very serious deficiency in HCFA's budget request for contractor operations, and to talk a bit about the magnitude of the deficiencies, the damage being done to the program, and our recommendations for actions that the committee might take.

HCFA has requested a budget this year of $920 million for contractor operations. Of that, they plan to use only $478 million for claims processing, that is $23 million less in 1986 than in 1985, and there are good indications that we are having trouble meeting the 1985 budget.

This cut comes in the face of a 10 percent increase in volume of claims, and an inflation factor of 4 or 5 percent, or whatever it is, the various TEFRA and DEFRA additions that Congress placed on us. The TEFRA and DEFRA are additional things that we have to do, and things that HCFA has required us to do.

Over the last 3 years there have been really substantial cuts made in the administrative budget for Medicare contractors. For instance, the cost of administering the program has been coming down year after year after year. It is a phenomenon in today's society.

Over the last 3 years, HCFA has come from—in 1983, the unit cost was $2.62, in 1984, it was $2.32, and in 1985, it is $1.85, and now they are proposing in 1986 that it be $1.75.

Senator PROXMIRE. You are talking about the administrative costs.

Mr. CARTER. Yes; the administrative costs, which are now, by the way, at or slightly below 1 percent.

This is basically a 33-percent reduction in the administrative costs over a 3-year period, and that is very drastic.

Senator PROXMIRE. Are you talking about the cost per unit?

Mr. CARTER. Yes; the unit cost.

Senator PROXMIRE. But there are more units.

Mr. CARTER. Yes; the units are going up on the basis——

Senator PROXMIRE. What is the total cost?

Mr. CARTER. I don't have it with me.

Senator PROXMIRE. Has the total cost been rising, or is it stable?

Mr. CARTER. The total cost, I am quite sure, has been rising because the volume of claims is going up.

Senator PROXMIRE. Why don't you give us that information for the record.

Mr. CARTER. The damage that is occurring to the program is in terms of quality, which has manifested itself in program payout and those program dollars.

To repeat something that Mr. Isbister said, it is really a pretty penny-wise and pound-fooling thing. I think there is an example in our written statement that bears this out.

Regarding the service to the beneficiaries, there is a substantial backlog of claims building up, and the time for payment is going up. For instance, 3 years ago, the volume of pending claims was 4.8 million, whereas today it is 11 million, or at least at the first of the year, it was 11 million, but now it is higher than that. That is an increase of 229 percent over 3 years in the backlog of claims.

What we would like to ask is that the committee consider adding $70 million to HCFA's budget request, and that that be earmarked rather specifically for claims processing because that is one of the problems that we are facing as was indicated in our statement.

More and more dollars are being used for areas other than processing claims and that is what has caused this serious problem that we are running into.

HCFA presents a different story. They say, why are we complaining because so far they have not been advised by a contractor that they can't do the job for the dollars that have been allocated to them. But this is primarily because HCFA is saying to the contractors: You simply take the dollars we are giving you, or else you can consider that your termination notice. Of course, a lot of us who have spent 20 years building this program up to where it is just don't feel that that is the proper way to resolve the problems you have.

So in addition to the funds, we have a serious problem that occurs between the current time and when the budget process is finally completed. In other words, HCFA is considering terminating some of the contractors based on their inadequate budget request.

We would ask, if possible, that the committee use its influence with OMB and HCFA that they don't precipitously terminate some contractors before the budget process has been completed.

We thank you very much for your time.

PREPARED STATEMENTS

Senator PROXMIRE. Thank you, Mr. Carter. You presented a very thoughtful statement. Your prepared statement will appear in the record at this point along with other statements for the record on the Health Care Financing Administration.

[The statements follow:]

STATEMENT OF LUTHER E. CARTER

I am Luther E. Carter, Chairman of the Medicare Administration Committee of the Health Insurance Association of America (HIAA) and also Vice President, Medicare Administration, for The Travelers Insurance Company. With me is Geza Kadar, Assistant Washington Counsel for HIAA. We appear on behalf of HIAA's Medicare Administration Committee and the nine member companies [1] that have served as Medicare carriers or intermediaries since the inception of the Medicare program in 1966. We appreciate the opportunity to present our position on the FY 1986 budget request of the Health Care Financing Administration (HCFA) concerning Medicare contractors.

The Medicare program has been a successful, cooperative effort, jointly administered by the federal government and private companies on a contractual basis of no profit/no loss. The quality of service to Medicare beneficiaries has been high, and the administrative costs for Medicare are now less than 1 percent, a truly remarkable record.

Despite the program's past success, a crisis of major proportion may be in the making. Because of cost-cutting and related changes implemented by HCFA, the Medicare program has developed serious problems. HCFA's FY 1986 budget request for Medicare contractors, which represents a reduction from the FY 1985 budget level, will only exacerbate these problems. It is essential that these problems be addressed at the earliest time possible. Indeed, even before the FY 1986 budget is acted upon, serious damage to the program may occur because of the current actions of the Office of Management and Budget (OMB) and HCFA.

To point up the problems, let me briefly state the fundamental objective of the Medicare program, as our committee perceives it: As claim administrators contracting with the federal government, we endeavor to provide prompt service to millions of elderly Medicare beneficiaries at the lowest cost possible to the federal government.

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[1] These companies include: Aetna Life & Casualty; Connecticut General Life Insurance Company; Equitable Life Assurance Society of the United States; General American Life Insurance Company; Mutual of Omaha Insurance Company; Nationwide Mutual Insurance Company; Occidental Life Insurance Company of California; Prudential Insurance Company of America; The Travelers Insurance Company.

Until two years ago, we achieved this fundamental objective through a cooperative effort with the federal government. This cooperative effort has begun to break down, however, and now the current budget proposal threatens chaos. If this situation is left unchecked, Medicare beneficiaries will experience serious delays in payment -- which many beneficiaries simply cannot afford -- and, ironically, administrative costs will actually increase.

There are two major problems with the current proposal to cut federal costs.

First, HCFA is focusing so earnesly on cost-cutting that it has begun to act in isolation, without a solid base of information. HCFA no longer asks contractors to submit a budget. Dr. Carolyne K. Davis, HCFA Administrator, confirmed this fact in testimony before the House Appropriations Committee's Subcommittee on Labor, Health and Human Services and Education on March 21, 1985. She was asked: "In arriving at the 1986 request, have you asked the contractors how much they think they need?" Her response was clear and direct: "No."

Instead, HCFA now acts more unilaterally. It uses an arbitrary and inequitable formula to distribute inadequate funds, despite provisions to the contrary in the Medicare contracts. Our contract provides that the contractor "shall submit to the Health Care Financing Administration . . . a budget of its estimated administrative expenses for a period corresponding to the Federal fiscal year." Further, it provides that "[t]he Secretary and the Carrier shall negotiate the amount of the annual budget . . . based on the amount submitted by the Carrier in an amount calculated to pay the costs of administering the Carrier's contract." Aside from its existence as a binding contractual requirement, this approach makes sense because the contractor's on-the-job experience is considered in the budget process.

A second problem is the sheer magnitude of the spending reduction now being proposed, even in the face of rising costs. This spending reduction proposal renders HCFA's FY 1986 budget request seriously inadequate.

The FY 1986 budget request for Medicare contractors is $920 million, which represents a $19.3 million reduction from FY 1985. This reduction ignores the 10 percent increase in claims volume, inflation, and substantial increases in HCFA's requirements from contractors, which will be addressed later.

In her March 21 testimony, Dr. Davis tried to defend the FY 1986 budget request of $920 million. When asked if this amount was "realistic," however, she replied that HCFA's original request was $958 million.

Recently, HCFA wrote to its Regional Administrators about this situation:

> [T]he Fiscal Year 1986 proposed funding for the Medicare Contractors is tight. Because payment safeguard activities are a priority of both the Administration and Congress, a substantial portion of the budget was applied to these areas. This allocation left a limited amount of funds available for claims processing and beneficiary and provider services. (Emphasis added.)

Only $478 million (of the $920 million proposed for Medicare contractors) in FY-1986 would be used for claims processing. This $478 million is a decrease of $23 million from the $501 million provided for FY 1985.

While HCFA has not solicited the contractors' input regarding funding, on April 4, 1985, the Carrier Representative Group and the Fiscal Intermediary Group sent a joint letter to HCFA stating:

> This is to follow-up our meeting on March 21. You've asked for our response to the advantages/disadvantages of a new formula (Option 2) for distributing approximately $478 million for FY-86 claims processing by the contractors. You did not ask for, but we must unequivocally provide, our view of the total figure: $478 million is seriously inadequate given the volume of claims and the quality control requirements that we must

> meet. Your formulas simply attempt to adequately distribute inadequate funds.

Based on the FY 1985 budget, the increased volume of claims, inflation and HCFA's increased requirements, the Medicare Administration Committee estimates that an additional $70 million is needed in FY 1986. We want to emphasize that these additional funds are needed primarily for claims processing.

There is also a serious question whether Medicare contractors will be able to meet even the FY 1985 budget. Most contractors are already in excess of their quarterly budget allotments, some by as much as 10 percent. This situation is due to inadequate funding, the priorities set by HCFA, and HCFA's inflexible distribution of budget to functions. It is also due to the large number of program changes requested by HCFA. These changes are being requested at an unprecedented rate, in most instances without consideration for the additional costs that are necessarily incurred by the contractors. Attached is a list of over fifty program changes in this fiscal year that were not considered in our budget negotiations. (See Attachment A.) Another change, not included in the list, is the recent two cent postage increase, which raised the contractors' costs by more than $2 million.

Based on these problems within both the FY 1985 budget and HCFA's FY 1986 budget request, the question that Congress should ask at this point is whether the Medicare program is a bloated administrative program crying out for cost reduction, or whether it is an efficient operation in which severe reductions might simply be irresponsible.

During the past few years, HCFA already has severely reduced claims processing funds. As a result, the average unit cost per claim for the contractors has declined steadily, a unique phenomenon by today's standards. In FY 1983, the average unit cost was already at a low point at $2.62. Nevertheless, in FY 1984, it was reduced to $2.32, and in FY 1985 to $1.95. These were drastic reductions, yet the funding for claims processing being proposed for FY 1986 is even lower: $1.75.

This cost-cutting, which has been mandated by HCFA, is passing the breaking point. Cuts of this magnitude are causing substantial damage to the Medicare program in terms of quality of service, and ironically these cuts can actually cause cost increases. There has been an almost total emphasis placed on administrative cost (which is less than 1 percent), with too little regard for the payout in benefit dollars.

For example, the contractors with the higher unit costs generally have a lower rate of overpayments, resulting in substantial savings to the Medicare program -- even after factoring in the difference between the unit costs. Attached is an analysis that fully illustrates this point. (See Attachment B.)

Also, despite the substantial savings that are attributable to a lower rate of overpayments, HCFA is now considering the termination of some contractors solely on the basis of higher than average unit costs and without regard for the quality of service. These terminations would be made by HCFA in an ill-advised attempt to come within its as yet unapproved FY 1986 budget request.

HCFA's cost-cutting has also created an extremely high backlog of unprocessed claims. The current backlog has grown from 4.8 million in 1983 to 11 million in January 1985 (an increase of 229 percent), causing unreasonable delays in processing claims with many negative results. Duplicate claims are being submitted with more frequency, and telephone calls and correspondence are also increasing. All of this significantly adds to a contractor's costs. Naturally, this also adversely affects beneficiary and provider relations.

HCFA may argue that some contractors are willing to accept the proposed funding levels, however inadequate. This argument ignores the effect on the quality of service. It also is misleading, because some contractors have such heavy involvement in the Medicare program that they have little choice but to accept the amounts dictated by HCFA. There are also indications that some contractors are subsidizing the program from their corporate funds.

This is not how the Medicare program is supposed to operate.

Mr. Chairman, we hope your Subcommittee will examine this situation and conclude, as we do, that $70 million should be added for this program -- substantially dedicated for claims processing. We also ask that your Subcommittee join with us in objecting to any precipitous action contemplated by HCFA, such as the termination of contractors solely on the basis of higher than average unit costs and without regard for the quality of service.

Attachment A

Part A

PART A PROGRAM CHANGES RECEIVED AFTER OCTOBER 1, 1984 HAVING COST RAMIFICATIONS

INTERMEDIARY MANUAL REVISIONS

HIM 13-3
Transmittals

1119: Prospective Payment System Comparison Report

1150: New Format of Tape from P.R.O.

1152: Cardiac pacemaker monitoring

1158: EMC data set (revised records 60/61)

1160: Special Processing of Selected V-Codes

1162: S3 trailer/Phase II "as is"

1163: Implement Unibill Specifications

1164: New home health data collection requirements

1165: Modified workload to track adjustments

1166: Decrease timeframes for home health services after provider terminations

1167: Hospital denial letter revisions

1170: Transfer of Medical Denials

1171: Benefit period determinations and SNF/hospital denial letters

o December 7, 1984 Telephone Conference on PRO physician identifiers and PRO Data Element correction process (retroactive)

- IL-A-84-20 UB-82 for all providers implementation

Audit/Reimbursement interim instructions issued by HCFA, however, HIM 13-4 and HIM 15 manual revisions pending for the following:

- CRNAs - Contractor resubmission of 1007 form after onsite review
  - Retroactive claim payment adjustments as costs are now pass-thru versus operating expenses.
- Intern and residents auditing requirements
- HHA/DME - need to adjust all HHA interim rates
- MSP adjustments to PIP and interim rates to preclude overpayments
- Came from December 1984 FIG/CRG meeting - Pilot test for Data Match with Private Side - New Jersey A
- Prospective Payment System Implementation
- Letter dated November 19, 1984 where HCFA directed Blues to release newly developed PS & R Reporting System to all Part A Medicare contractors - Provider Statistical and Reimbursement Reporting System
- Draft of Sections A3620-A3630 and Section 3770.1 dated November 27, 1984 - Screening Physician's License Number and Zip Code
- Expand use of HCFA-1450 to all non-hospital providers by 9-30-85 (Part A).
- Recoup overpayments on inappropriate non-physician services (Parts A/B).
- Mandated use of standardized HHA Medical Review form 443; provider education & training (Part A).
- Develop capability to accept adjustments electronically from PROs (Part A).
- Special GAO request to provide Medicare Claims Information for a review of costs used to develop the DRG relative weights and payment rates under PPS (Part A).
- Special HCFA request for data relative to Maryland waiver (Part A).
- Various proposed PATROL initiatives (e.g., oxygen therapy, oxygen concentrators, catheter supplies, portable x-ray systems, carrier pricing of laboratory panel tests, additional reporting on Interim Rate increases which exceed certain variances, etc.) (Parts A/B).
- Medicare Secondary Payer workshops and on-site reviews (Part A).
- Create drop file for provider correspondence (Part A CPEP Element 1, Section 2901.3).
- Requirements for submission of administrative and financial reports using Medicare Automated Network; more frequent financial reporting (Parts A/B).
- Inclusion of staff as a part of the Special Mergers and Acquisition Review Team (SMART) set up to evaluate and propose guidelines to be used in Sales, Acquisitions and Mergers (Part A).

Part B

- MCM Transmittal 77 - Implementation of Mandated MR/UR Screens effective 10-1-84.

  Details of the mandated parameters were not received until 10-18-84; receipt of these instructions held up development of internal claim review/processing guidelines, systems work and evaluation of ramifications to planned workload. Also, this added revisions to the post-payment UR activity effective 10-1-84; received 11-5-84 which will require significant resource with very questionable benefit returns.

- MCM Transmittal 1050 and 1062 - Coordination Part A denials (A/B Link) #1050 effective 10-1-84; received 10-21-84, #1062 effective 1-1-85; received 1-3-85.

  Adds workload to carriers' medical review and postpayment staff with great potential for increasing development; adds systems work to set up and monthly production run time.

- MCM Transmittal 1051 - Pacemaker monitoring effective 10-1-84; received 10-2-84.

  Adds extensive screening parameters which will significantly increase the claim review workload and potentially, rate of claim development. While HCFA had indicated earlier that new guidelines would be published, obviously making them available in October was too late for incorporation into planning.

- MCM Transmittal 1057 - Additional "Y" trailer codes for MSP.

- MCM Transmittal 1067 - DME Claims Processing and reimbursement decisions effective 2-1-85; received "advance" 12-17-84. (DME Rent/Purchase)

  Dictates major changes in handling of DME claims affecting workloads of provider relations, systems, and most significantly, DME claims examiner resources, therefore, causing a major cost increase in processing of DME claims.

- Medicare Data Match with Transamerica Occidental Life Insurance Company Insured.

- HCPCS yearly update.

- EMC Format change - advance draft from HCFA.

- Deficit Reduction Act - Section 2303 - Lab Services.

- Funding for New Cost Reporting Monthly Requirements plus Accelerated Schedule.

- Came from December 1984 FIG/CRG meeting - Pilot test for Data Match with Private Side - New Jersey B

- Letter dated October 25, 1984 from HCFA, Region II, Division of Program Operations - Patrol Initiative - Screen for DME during SNF/ICF Stay

- Came from Baltimore TAG meeting held on November 15, 1984 (I. L. Pending) - Medicare Data System - Prevailing Files FSY '84

- Came from Baltimore TAG meeting held on November 15, 1984 (I. L. Pending) - Modified 1565A Report - Participating/Non-Participating

- Coordinate Part B DME payments so as not to pay for in 1861j1 beds (Part B).

- Provide P-20 level of telephone service for ALL telephone lines, LOCAL as well as long distance.

- Standards of quality for the handling of inquiries have been significantly upgraded. These standards have been transmitted through Transmittal No. 78, Carriers Manual, Part 2, Program Administration.

- Develop Medicaid data exchange for beneficiaries residing in nursing homes.

- Develop Part B Medicare Data (BMAD) System.

- Develop unique physician identification numbers.
- Deficit Reduction Act.

  Monitoring of non-participating providers: interim instructions (IM 84-4) received 10-26-84 for January, 1985 effecting. No final instructions have been received to date and there is no way of determining postpay resource requirements at this time, since these will be dependent on volume of aberrant physicians.

  Assignment violations/participating physicians: While C.O. indicated at our November 1 CRG meeting that they expected assignment violations to decrease, the fact is that in the first 2 month period we have seen an 850% increase generating tremendous unplanned workload.

  Sanctions/Civil Monetary Penalty activity: Looking at the CMP experience in 1984, postpay staff has devoted significant time to support CMP activity without receiving HCFA's timely effecting of the carrier's referrals, thus causing additional unplanned recomputations. We do not expect that CMP's generated under DRA will have a better experience.
- Medpard Listing
- Revised Medpard Listing (Addendum)
- PARL Listing
- DRA Participating Physician

  Three notification letter and mailing of certificates to participating physician and travelers RRB

  Toll free telephone lines for claims transmission by participating physicians

  3 month profile build

  Revised profile for period starting October 1
- Revision of reporting requirements
  For MR/UR - This changes costs and adversely impacts cost benefit
- Monitoring Equipment for TFTS to meet STD in CPEP - impacted by DRA provisions
- Secondary Liability
  Liability and auto - definitive instructions not received until October
- CRIL requiring front-end screening of ambulance claims
- Mandatory trend analysis entitled "Moshman Trend Analysis"

Attachment B

ADMINISTRATIVE COSTS VS. BENEFIT SAVINGS

There is a definite correlation between the contractor's unit cost and the quality of performance. HCFA measures the quality of performance through its Quality Assurance (QA) program, which examines, among other things, the carrier's overpayment error rates. Generally, the carriers with a higher cost have a lower rate of overpayments resulting in substantial savings to the program even after the difference in unit costs are factored in.

A comparison of the five (5) best carriers 1/ with the five (5) worst carriers 2/ in terms of overpayment error rates reveals the following:

Average overpayment error rate for five (5) best carriers	0.3%
Average overpayment error rate for five (5) worst carriers	1.5%
Difference in overpayment error rates	1.2%
Additional overpayments ($1,351,015,004 x 1.2%)	$16,212,000
Less administrative savings	$ 3,842,000
Net Loss to the Federal Government	$12,370,000

If the five (5) worst carriers' were funded at the same (higher) unit cost and were able to achieve the same (lower) overpayment error rate as the five (5) best carriers, the following would occur:

Average increase in unit cost per claim for five (5) worst carriers	0.17
Average decrease in overpayment error rate for five (5) worst carriers	1.2%
Reduction in overpayments ($6,129,912,424 x 1.2%)	$73,559,000
Administrative cost increase (40,785,492 x $0.17)	$ 6,934,000
Net Savings to the Federal Government	$66,625,000

Letter From Mary Nell Lehnhard, Vice President, Blue Cross and Blue Shield Association

June 4, 1985

Senator William Proxmire
Ranking Minority Member
Senate Appropriations
Subcommittee on Labor, HHS, Education
Room 186 - Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Proxmire:

On May 8, 1985 while testifying before the Senate Appropriations Subcommittee on Labor/HHS/Education on the subject of Medicare contractor funding, you asked our

---

1/ These carriers include: Travelers-Minnesota; NH/VT-Blue Shield; Travelers-Virginia; Aetna-Hawaii; and Arkansas-Blue Shield.

2/ These carriers include: Florida-Blue Shield; Alabama-Blue Shield; Massachusetts-Blue Shield; General American; and Texas-Blue Shield.

witness, Jim Isbister, to provide additional information regarding ambulatory surgery procedures. In subsequent clarifying discussions with your staff it was determined that your interest is in learning how Blue Cross and Blue Shield Plans selects procedures that can safely be performed in an ambulatory surgical setting.

The Blue Cross and Blue Shield Association in February of this year developed both a core list of procedures and a supplemental procedure list for ambulatory surgery programs. While such programs have been implemented by many Blue Cross and Blue Shield Plans, the specific list of procedures covered or excluded by Plans has varied. The Association sought to develop model lists of recommended procedures which would provide more uniformity to the variety of approaches being offered, especially for national rather than local employers. The core list represents a set of specified procedures for use with national or large employers. The supplemental list suggests additional procedures that Blue Cross and Blue Shield Plans may wish to consider for their local programs.

The procedure selection criteria for a model ambulatory surgery program include:

- procedures common to Blue Cross and Blue Shield Plans and other third party payers with functioning ambulatory surgery programs;
- procedures generally performed in inpatient hospital settings that can be safely performed in outpatient or ambulatory surgery settings; and
- procedures not being performed in physician offices.

The last criterion, "procedures not being performed in physician offices", was included as a control so that procedures already routinely performed in physician offices would not be shifted to more costly outpatient hospital or surgical center settings.

Applying these criteria the Association identified 17 procedure categories for the core list and 2 procedure categories for the supplemental list. It should be recognized that the term category may include as few as one procedure code (dilation and curettage) to as many as 66 procedure codes (oral surgery). The core list identifies 195 procedure codes while the supplemental list identifies 112 procedure codes. A listing of the core and supplemental list is attached for your information.

The purpose of the list is to develop a list of procedures compatible with a disincentive ambulatory surgery benefit which would provide a financial disincentive for performing the listed procedures in a more costly setting. The financial disincentive most often manifests itself as a payment differential. For example, if one of the procedures on the list is performed on an inpatient basis, without indications of being medically necessary or appropriate, the covered services may be reimbursed at a lower rate.

It should be emphasized that the ambulatory surgery list is not intended to preclude performance of a listed procedure in an inpatient setting in all cases. Rather the list is designed to ensure that surgery is performed in the least costly setting appropriate to the case. There will be times when an inpatient admission for a listed procedure will be medically necessary and appropriate and would therefore be paid at a higher rate than if performed in an ambulatory setting.

The Blue Cross and Blue Shield Association is justifiably proud of its many innovative and effective cost containment initiatives. The ambulatory surgery program is one such initiative. The Association welcomes your interest in this program and will gladly provide additional information upon request.

Respectfully,

Mary Nell Lehnhard
Vice President

AMBULATORY SURGERY PROCEDURE LIST

Core Procedure Categories

1) Breast biopsy (needle or incisional)
2) Carpal tunnel decompression
3) Cataract extraction
4) Cystoscopy
5) Dilation and curettage
6) Excision of Bartholin's gland and cyst
7) Ganglionectomy
8) Gastrointestinal endoscopy
    - esophagoscopy
    - gastroscopy (flexible fiberoptic)
    - colonoscopy (flexible fiberoptic)
    - duodenoscopy (flexible fiberoptic)
9) Hemorrhoidectomy
10) Inguinal hernia repair
11) Laparoscopy with tubal ligation
12) Oral surgery
13) Strabismus surgery
14) Tonsillectomy and adenoidectomy
15) Umbilical hernia repair
16) Varicose vein stripping, ligation and injection
17) Ventral/femoral hernia repair

Supplemental Procedure Categories

1) Cardiac catheterization
2) Reduction of closed fractures/dislocations of extremities

AMBULATORY SURGERY PROCEDURE CODE LIST: CORE

1) Breast biopsy (needle or incisional)

HCPCS	ICD-9
19100	85.11
19101	85.12

2) Carpal tunnel decompression

64721	04.43

3) Cataract extraction

66830	66945		13.11	13.62	13.71
66840	66980		13.2	13.63	
66850	66985		13.41	13.64	
66915			13.41	13.65	
66920			13.42	13.66	
66930			13.51	13.69	
66940			13,61	13.70	

4) Cystoscopy

52100	52265	52310	57.31
52105	52270	52315	57.32
52107	52275	52320	
52110	52276	52330	
52202	52277	52332	
52212	52280	52335	
52222	52282		
52250	52290		
52260	52300		

5) Dilation and Curettage

58120	69.0
	69.09

6) Excision of Bartholin's gland/cyst

56440	71.23
56740	71.24

7) Ganglionectomy

28090	83.31
26160	82.21
27630	
28090	
28092	
25111	
25112	

8) Gastrointestinal endoscopy

esophagoscopy

43200	43219	42.22
43202	43220	42.23
43204		
43215		
43217		
43218		

gastroscopy (flexible fiberoptic)

43235	44.12
43239	44.13
43247	44.14
43251	
43255	
43258	

colonoscopy (flexible fiberoptic)
45360
45365
45367
45368
45370
45371
45378
45379
45380
45382
45385
45386
45.23
45.25

duodenoscopy (flexible fiberoptic)
44360
44361
44363
44364
44366
44369
45.13
45.14

9) Hemorrhoidectomy
46221
46250
46255
46257
46258
46260
46261
46262
49.43
49.44
49.45
49.46

10) Inguinal hernia repair
49500
49505
49510
49515
49520
49525
49530
49535
53.00
53.01
53.02
53.03
53.04
53.05
53.10
53.11
53.12
53.13
53.14
53.15
53.16
53.17

11) Laparoscopy with tubal ligation
58982
58953
66.2

12) Oral surgery
40806
40808
40810
40812
40814
40816
40818
40819
40820
40840
40842
40843
40844
40845
41100
41105
41108
41115
41116
41850
41870
41872
41874
41899
D7110
D7120
D7210
D7220
D7230
D7240
D7241
D7250
D7280
D7281
D7285
D7286
D7290
D7310
D7465
D7470
D7480
D7490
D7970
D7960
23.00
23.01
23.09
23.10
23.19
23.6
23.73
24.0
24.11
24.12
24.19
24.2
24.31
24.39
24.4
24.5
24.6
24.91
24.99
25.0
25.1
25.9
27.2
27.31
27.41
27.43
27.49
27.91
27.92
27.99

41805	D7320		
41806	D7340		
41820	D7350		
41821	D7410		
41822	D7420		
41823	D7430		
41825	D7431		
41826	D7440		
41827	D7450		
41828	D7451		
41830	D7460		

13) Strabismus surgery

67311		15.1	15.6
67312		15.2	
67320		15.3	
67331		15.4	
67332		15.5	

14) Tonsillectomy and adenoidectomy

42820		28.2
42821		28.3
42825		28.6
42826		
42830		
42831		
42835		
42836		

15) Umbilical hernia repair

49580		53.4
49581		

16) Varicose vein stripping, ligation and injection

36470	37780	38.5
36471	37781	39.92
37720	37785	
37721	37787	
37730		
37731		
37735		
37737		

17) Ventral/femoral hernia repair

49550		53.2
49552		53.3
49555		53.59
49560		
49565		

AMBULATORY SURGERY PROCEDURE CODE LIST: SUPPLEMENTAL

1) Cardiac catheterization

93501
93503
93510
93511
93514
93515
93524

93526
93527
93528

37.21
37.22
37.23

2) Reduction of closed fractures/dislocations of extremities

23600
23605
24500
24505
24560
24576
24577
24600
24605
24620
24650
24655
24670
24675
25500
25505
25530
25535
25560
25565
25600
25605
25610
25622
25624
25630
25635
25650
25675
25680
25690

26600
26605
26645
26650
26670
26675
26700
26705
26720
26725
26740
26742
27650
26755
26770
26775
26785
27500
27502
27508
27510
27516
27517
27520
27530
27532
27538
27550
27552
27560
27562

27750
27752
27760
27762
27780
27781
27786
27788
27800
27802
27808
27810
27816
27818
27830
27831
27840
27842
28400
28430
28435
28450
28455
28470
28475
28490
28495
28510
28515
28540
28545

28570
28575
28600
28605
28606
28630
28635
28660
28665

79.0
79.4
79.7

SUBCOMMITTEE RECESS

Senator PROXMIRE. The subcommittee will stand in recess until Thursday, May 9, when we will meet again in SD–116 and hear from public witnesses on the budgets for the Health Resources and Service Administration and vocational education.

[Whereupon, at 1:05 p.m., Wednesday, May 8, the subcommittee was recessed, to reconvene at 9:30 a.m., Thursday, May 9.]

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